

## Utilities: Entity Types and Attributes

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**ENTITY TYPE NAME** electrical\_bus\_line

**ENTITY CLASS NAME** utilities\_electrical\_system

**OBJECT TYPE** String/Chain

**DEFINITION** A rigid metallic conductor (copper or aluminum), typically in the form of a flat bar, angle stock, or square tubing.

**Attribute Name**

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bil_rat_d	bus_mat_d	busgrp_id	cbl_use_d	dispostn_d	elesect_id
event_id	facil_id	frame_ty_d	frcoord_x	frcoord_y	narrative
no_conduct	no_neutral	project_id	reactance	resistance	sizeneut_d
substa_id	tocoord_x	tocoord_y	tocoord_z	voltage_d	

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**ENTITY TYPE NAME** electrical\_cable\_line

**ENTITY CLASS NAME** utilities\_electrical\_system

**OBJECT TYPE** String/Chain

**DEFINITION** A group of conductors used to carry electrical energy from point to point.

**Attribute Name**

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cbl_length	cbl_mat_d	cblgrp_id	cfg_ty_d	circuit_id	condsize_d
dispostn_d	ductbnk_id	elesect_id	event_id	facil_id	frcoord_x
frcoord_y	instl_ty_d	insulmat_d	length_u_d	narrative	neutsize_d
no_conduct	no_neutral	no_phases	owner_d	phas_ltr_d	project_id
substa_id	tocoord_x	tocoord_y	tocoord_z	voltage_d	

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**ENTITY TYPE NAME** electrical\_capacitor\_point

**ENTITY CLASS NAME** utilities\_electrical\_system

**OBJECT TYPE** Point

**DEFINITION** An electrical device placed in a circuit to correct power factor by adding reactive power to the circuit.

**Attribute Name**

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circuit_id	cntr_ty_d	cpctr_id	cpctr_kv_d	cpctr_u_d	dispostn_d
event_id	facil_id	instl_ty_d	manuf_id	model_no	narrative
no_phases	phas_ltr_d	project_id	serial_no	substa_id	switch_d
voltage_d					

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**ENTITY TYPE NAME** electrical\_ductbank\_line

**ENTITY CLASS NAME** utilities\_electrical\_system

**OBJECT TYPE** String/Chain

**DEFINITION** A tubular structure that provides protection for underground cables contained in conduit.

**Attribute Name**

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dbk_length	dbk_size_d	dispostn_d	duct_mat_d	ductbnk_id	eleselect_id
event_id	facil_id	frcoord_x	frcoord_y	length_u_d	manuf_id
narrative	no_ducts	no_spares	project_id	substa_id	tocoord_x
tocoord_y	tocoord_z	voltage_d			

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**ENTITY TYPE NAME** electrical\_generator\_point

**ENTITY CLASS NAME** utilities\_electrical\_system

**OBJECT TYPE** Point

**DEFINITION** A machine which converts mechanical energy into electrical energy.

**Attribute Name**

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autotran_d	circuit_id	cool_ty_d	cptcy_u_d	dispostn_d	eng_man_id
eng_model	eng_ser_no	engine_hp	event_id	facil_id	fuel_ty_d
gen_ty_d	genratr_id	hertz_d	kva_rate	kw_rate	manuf_id
model_no	narrative	no_phases	oil_cptcy	permit_no	phas_ltr_d
power_fact	project_id	serial_no	sound_d	substa_id	voltage_d

---

**ENTITY TYPE NAME** electrical\_ground\_point

**ENTITY CLASS NAME** utilities\_electrical\_system

**OBJECT TYPE** Point

**DEFINITION** The location where the electrical configuration is grounded.

**Attribute Name**

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elgrnd_id	facil_id	feat_desc
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**ENTITY TYPE NAME** electrical\_junction\_point

**ENTITY CLASS NAME** utilities\_electrical\_system

**OBJECT TYPE** Point

**DEFINITION** A box or small vault (usually concrete, brick, or metal) typically located below grade with above grade access in which cables intersect, connect, or pass through.

**Attribute Name**

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dia_u_d	dispostn_d	drain_ty_d	elemnhl_id	elv_u_d	event_id
facil_id	floor_elv	manuf_id	mat_d	mh_dia	narrative
no_cables	project_id	rim_elv	substa_id	type_d	use_d

---

**ENTITY TYPE NAME** electrical\_marker\_point

**ENTITY CLASS NAME** utilities\_electrical\_system

**OBJECT TYPE** Point

**DEFINITION** A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc., identifying the location of the electrical equipment.

**Attribute Name**

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elmark_id	facil_id	feat_desc
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**ENTITY TYPE NAME** electrical\_meter\_point

**ENTITY CLASS NAME** utilities\_electrical\_system

**OBJECT TYPE** Point

**DEFINITION** A device installed in a line for measuring the electrical power supplied to a facility or through a section of line.

## Utilities: Entity Types and Attributes

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<b>Attribute Name</b>					
amp_rate	circuit_id	cptcy_kva	dispostn_d	event_id	facil_id
hertz_d	kw_rate	manuf_id	meter_id	meter_ty_d	model_no
mtr_const	mtr_use_d	narrative	no_phases	owner_d	phas_ltr_d
project_id	serial_no	substa_id	voltage_d		

---

**ENTITY TYPE NAME** electrical\_motor\_point

**ENTITY CLASS NAME** utilities\_electrical\_system

**OBJECT TYPE** Point

**DEFINITION** A machine that converts electrical energy into mechanical energy.

<b>Attribute Name</b>					
circuit_id	dispostn_d	enclty_d	event_id	facil_id	hertz_d
insul_cl_d	manuf_id	model_no	motor_hp	motor_id	motor_ty_d
narrative	no_phases	permit_no	phas_ltr_d	power_fact	project_id
serial_no	start_ty_d	voltage_d	wind_ty_d		

---

**ENTITY TYPE NAME** electrical\_pedestal\_point

**ENTITY CLASS NAME** utilities\_electrical\_system

**OBJECT TYPE** Point

**DEFINITION** An above ground enclosure which provides access to underground cables.

<b>Attribute Name</b>					
circuit_id	dispostn_d	event_id	manuf_id	model_no	narrative
ped_id	project_id	serial_no			

---

**ENTITY TYPE NAME** electrical\_regulator\_point

**ENTITY CLASS NAME** utilities\_electrical\_system

**OBJECT TYPE** Point

**DEFINITION** An electrical device that maintains its output voltage at a certain level even though its input voltage varies in a certain range over time.

<b>Attribute Name</b>					
circuit_id	cool_ty_d	cptcy_u_d	date_manuf	dispostn_d	elereg_id
event_id	facil_id	fuse_rate	fuse_ty_d	instl_ty_d	kva_rate
manuf_id	model_no	narrative	no_phases	no_taps	oil_cptcy
owner_d	phas_ltr_d	prcnt_tap	pri_volt_d	project_id	reg_type_d
reg_use_d	reg_weight	sec_volt_d	serial_no	substa_id	weight_u_d

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**ENTITY TYPE NAME** electrical\_splice\_point

**ENTITY CLASS NAME** utilities\_electrical\_system

**OBJECT TYPE** Point

**DEFINITION** The connection of two separate cables at their ends or the tapping of a conductor along the path of another conductor.

## Utilities: Entity Types and Attributes

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### Attribute Name

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elspice_id	facil_id	feat_desc
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**ENTITY TYPE NAME** electrical\_substation\_point

**ENTITY CLASS NAME** utilities\_electrical\_system

**OBJECT TYPE** Point

**DEFINITION** A facility in an electrical system where the voltage is reduced from transmission levels to distribution levels.

### Attribute Name

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cpcy_oper	cpcy_rate	cpcy_u_d	dispostn_d	event_id	facil_id
narrative	no_circuit	no_spares	no_trans	owner_d	project_id
sst_ty_d	substa_id	volt_in_d	volt_out_d		

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**ENTITY TYPE NAME** electrical\_switch\_point

**ENTITY CLASS NAME** utilities\_electrical\_system

**OBJECT TYPE** Point

**DEFINITION** A device which closes and opens (connects and disconnects) an electrical circuit.

### Attribute Name

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circuit_id	dim_u_d	dispostn_d	event_id	facil_id	instl_ty_d
manuf_id	model_no	narrative	no_phases	no_switch	owner_d
phas_ltr_d	project_id	serial_no	substa_id	sw_cub_no	switch_dim
switch_id	switch_rat	swt_sta_d	swt_ty_d	swt_weight	voltage_d
weight_u_d					

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**ENTITY TYPE NAME** electrical\_transformer\_bank\_point

**ENTITY CLASS NAME** utilities\_electrical\_system

**OBJECT TYPE** Point

**DEFINITION** A location containing one or more transformers.

### Attribute Name

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circuit_id	dispostn_d	event_id	facil_id	mount_d	narrative
no_trans	pri_volt_d	project_id	sec_volt_d	substa_id	total_kva
tran_cap1	tran_cap2	tran_cap3	tranbnk_id		

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**ENTITY TYPE NAME** electrical\_transformer\_point

**ENTITY CLASS NAME** utilities\_electrical\_system

**OBJECT TYPE** Point

**DEFINITION** A device for increasing or decreasing voltage levels in an electrical system.

## Utilities: Entity Types and Attributes

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<b>Attribute Name</b>					
cool_ty_d	cptcy_u_d	date_manuf	dispostn_d	event_id	facil_id
fuse_rate	fuse_ty_d	instl_ty_d	kva_rate	load_prcent	manuf_id
model_no	narrative	no_phases	oil_cptcy	owner_d	phas_ltr_d
pri_volt_d	project_id	sec_volt_d	serial_no	substa_id	tran_use_d
tran_wt	tranbnk_id	trans_id	tranvlt_id	trf_type_d	weight_u_d

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**ENTITY TYPE NAME** electrical\_transformer\_vault\_point

**ENTITY CLASS NAME** utilities\_electrical\_system

**OBJECT TYPE** Point

**DEFINITION** An enclosure housing one or more transformers.

<b>Attribute Name</b>					
dispostn_d	event_id	facil_id	manuf_id	model_no	narrative
no_trans	project_id	serial_no	substa_id	tranvlt_id	

---

**ENTITY TYPE NAME** energy\_control\_monitoring\_cable\_line

**ENTITY CLASS NAME** utilities\_cntrl\_mntr\_system

**OBJECT TYPE** String/Chain

**DEFINITION** Data transmission media, typically fiber optics or shielded twisted-pair.

<b>Attribute Name</b>					
cable_id	cbl_dim_d	cbl_lenght	cbl_mat_d	cbl_sht_d	cbl_ty_d
db_loss	dispostn_d	ecmcirc_id	ecmdbname_id	ecmsect_id	facil_id
frcoord_x	frcoord_y	instl_ty_d	length_u_d	loosbuf_d	narrative
no_links	no_pairs	project_id	tocoord_x	tocoord_y	tocoord_z

---

**ENTITY TYPE NAME** energy\_control\_monitoring\_device\_point

**ENTITY CLASS NAME** utilities\_cntrl\_mntr\_system

**OBJECT TYPE** Point

**DEFINITION** Devices used in an energy monitoring/control system to collect, process or transmit data signals.

<b>Attribute Name</b>					
anlg_in	anlg_in_sp	anlg_ot	anlg_ot_sp	date_manuf	dev_ty_d
device_id	dgtl_in	dgtl_in_sp	dgtl_ot	dgtl_ot_sp	dispostn_d
facil_id	imped_u_d	impedance	instl_ty_d	manuf_id	model_no
narrative	no_pairlnk	project_id	readout_d	serial_no	

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**ENTITY TYPE NAME** energy\_control\_monitoring\_ductbank\_line

**ENTITY CLASS NAME** utilities\_cntrl\_mntr\_system

**OBJECT TYPE** String/Chain

**DEFINITION** A structure containing multiple conduits used to protect underground cables.

## Utilities: Entity Types and Attributes

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**Attribute Name**


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dbk_length	dbk_size_d	dispostn_d	duct_mat_d	ecmdbnk_id	ecmsect_id
facil_id	frcoord_x	frcoord_y	length_u_d	narrative	no_ducts
no_spares	project_id	substa_id	tocoord_x	tocoord_y	tocoord_z
voltage_d					

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**ENTITY TYPE NAME** energy\_control\_monitoring\_junction\_point

**ENTITY CLASS NAME** utilities\_cntrl\_mntr\_system

**OBJECT TYPE** Point

**DEFINITION** A box or small vault located below grade with above grade access where cables intersect, connect, or pass through.

**Attribute Name**


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dispostn_d	ecmcirc_id	ecmped_id	event_id	facil_id	manuf_id
model_no	narrative	project_id	serial_no		

---

**ENTITY TYPE NAME** energy\_control\_monitoring\_marker\_point

**ENTITY CLASS NAME** utilities\_cntrl\_mntr\_system

**OBJECT TYPE** Point

**DEFINITION** A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc.

**Attribute Name**


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buildng_id	date_acqrd	dim_u_d	dispostn_d	facil_id	manuf_id
marker_id	model_no	narrative	own_stat_d	owner_d	owner_ty_d
pole_depth	pole_hght	pole_mat_d	project_id	rock_cnd_d	sign_hgth
sign_mat_d	sign_text	sign_width	soil_cnd_d	type_d	

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**ENTITY TYPE NAME** exterior\_lighting\_point

**ENTITY CLASS NAME** utilities\_electrical\_ext\_light

**OBJECT TYPE** Point

**DEFINITION** Locations of point sources of general external lighting.

**Attribute Name**


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ext_lit_id	facil_id	lit_typ_d
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**ENTITY TYPE NAME** fuel\_air\_eliminator\_point

**ENTITY CLASS NAME** utilities\_fuel\_system

**OBJECT TYPE** Point

**DEFINITION** A device or structure placed in the fuel distribution system to separate air from petroleum products.

**Attribute Name**


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facil_id	feat_desc	fulair_id
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## Utilities: Entity Types and Attributes

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**ENTITY TYPE NAME** fuel\_anode\_point

**ENTITY CLASS NAME** utilities\_fuel\_system

**OBJECT TYPE** Point

**DEFINITION** A material used for utility distribution systems that is electrically connected to a less electrolytically active material so that it will oxidize in the place of the less active material.

**Attribute Name**

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anode_wght	facil_id	fulanod_id	material_d	narrative	wght_u_d
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**ENTITY TYPE NAME** fuel\_anode\_test\_station\_point

**ENTITY CLASS NAME** utilities\_fuel\_system

**OBJECT TYPE** Point

**DEFINITION** A central location where anodes are tested for performance.

**Attribute Name**

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facil_id	fulant_id	insl_typ_d	narrative	no_term	type_d
wire_siz_d		wire_typ_d			

---

**ENTITY TYPE NAME** fuel\_filter\_strainer\_point

**ENTITY CLASS NAME** utilities\_fuel\_system

**OBJECT TYPE** Point

**DEFINITION** A device through which fuel is passed to remove impurities to the fuel. Usually placed in fuel lines near fill points.

**Attribute Name**

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facil_id	feat_desc	fulflt_id
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**ENTITY TYPE NAME** fuel\_fitting\_point

**ENTITY CLASS NAME** utilities\_fuel\_system

**OBJECT TYPE** Point

**DEFINITION** A fitting is an item used to connect, cap, plug or otherwise alter a pipe.

**Attribute Name**

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buildng_id	date_acqrd	dim_u_d	dispostn_d	facil_id	fit_lgth
fit_width	fulfitt_id	fulpipe_id	fulsect_id	fulzone_id	manuf_id
mat_d	model_no	narrative	own_stat_d	owner_d	owner_ty_d
project_id	serial_no	size_d	type_d		

---

**ENTITY TYPE NAME** fuel\_hydrant\_point

**ENTITY CLASS NAME** utilities\_fuel\_system

**OBJECT TYPE** Point

**DEFINITION** Location where fuel is control discharged to users.

## Utilities: Entity Types and Attributes

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<b>Attribute Name</b>					
buildng_id	date_acqrd	dia_u_d	dispostn_d	elv_u_d	facil_id
fulhydr_id	fulpipe_id	fulzone_id	hyd_elv	hyd_ty_d	manuf_id
model_no	narrative	outcon1dia	outcon2dia	outcon3dia	own_stat_d
owner_d	owner_ty_d	press_resd	press_stat	press_u_d	project_id
valve_id	vlv_st_d				

---

**ENTITY TYPE NAME** fuel\_junction\_point

**ENTITY CLASS NAME** utilities\_fuel\_system

**OBJECT TYPE** Point

**DEFINITION** A box or small vault (usually concrete, brick, or cast iron) located below grade with above grade access where pipes intersect. The manhole also houses associated fittings, valves, meters, etc.

<b>Attribute Name</b>					
airrvlv_d	buildng_id	dim_u_d	dispostn_d	drain_ty_d	elv_u_d
facil_id	fulmnhl_id	fulzone_id	invert_elv	manuf_id	mat_d
mh_dia	mh_length	mh_width	model_no	narrative	no_pipes
no_valves	own_stat_d	owner_d	owner_ty_d	project_id	rim_elv
status_d	type_d	use_d			

---

**ENTITY TYPE NAME** fuel\_line

**ENTITY CLASS NAME** utilities\_fuel\_system

**OBJECT TYPE** String/Chain

**DEFINITION** A pipe used to carry a substance from location to location (main line, service line, vent line, etc).

<b>Attribute Name</b>					
buildng_id	catprot_d	date_acqrd	dim_u_d	dispostn_d	elv_u_d
facil_id	frcoord_x	frcoord_y	fuel_ty_d	fulpipe_id	fulsect_id
fulstat_id	fulzone_id	inv_elv_1	inv_elv_2	manuf_id	mat_d
model_no	narrative	own_stat_d	owner_d	owner_ty_d	pipe_lgth
press_max	press_norm	press_u_d	project_id	size_d	slope_bot
slope_u_d	source_id	tank_id	tocoord_x	tocoord_y	tocoord_z
type_d	use_d				

---

**ENTITY TYPE NAME** fuel\_marker\_point

**ENTITY CLASS NAME** utilities\_fuel\_system

**OBJECT TYPE** Point

**DEFINITION** A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc.

## Utilities: Entity Types and Attributes

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<b>Attribute Name</b>					
buildng_id	date_acqrd	dim_u_d	dispostn_d	facil_id	manuf_id
marker_id	model_no	narrative	own_stat_d	owner_d	owner_ty_d
pole_depth	pole_hght	pole_mat_d	project_id	rock_cnd_d	sign_hgth
sign_mat_d	sign_text	sign_width	soil_cnd_d	type_d	

---

**ENTITY TYPE NAME** fuel\_meter\_point

**ENTITY CLASS NAME** utilities\_fuel\_system

**OBJECT TYPE** Point

**DEFINITION** A device installed in a line for measuring the quantity and or rate of fuel to a facility or through a section of line.

<b>Attribute Name</b>					
buildng_id	date_acqrd	dispostn_d	elv_u_d	facil_id	fulmetr_id
fulmnhl_id	fulpipe_id	fulzone_id	instl_ty_d	manuf_id	meter_elv
model_no	mtr_custmr	narrative	own_stat_d	owner_d	owner_ty_d
project_id	serial_no	size_d	srvc_mtr_d	type_d	

---

**ENTITY TYPE NAME** fuel\_oil\_water\_separator\_point

**ENTITY CLASS NAME** utilities\_fuel\_system

**OBJECT TYPE** Point

**DEFINITION** A filtering device placed in the fuel stream specifically to remove oil and water from the fuel.

<b>Attribute Name</b>					
cpty_u_d	date_acqrd	date_per_x	disposal	dispostn_d	facil_id
flow_u_d	flowcpty	fulstat_id	grtchbr_d	manuf_id	narrative
oil_cpty	own_stat_d	owner_d	owner_ty_d	permit_no	pip_out_id
pipe_in_id	project_id	sep_code	sep_contnt	sep_id	sep_name
sep_process	sep_volume	temp_optim	temp_u_d	type_d	vol_u_d

---

**ENTITY TYPE NAME** fuel\_pump\_booster\_station\_point

**ENTITY CLASS NAME** utilities\_fuel\_system

**OBJECT TYPE** Point

**DEFINITION** A building in which one or more pumps operate to supply material flowing at adequate pressure to or from a distribution system.

<b>Attribute Name</b>					
buildng_id	cond_d	cpty_almr	cpty_u_d	date_acqrd	design_d
dim_u_d	dispostn_d	elv_u_d	facil_id	fuel_src_d	fulstat_id
fulzone_id	narrative	no_pumps	nodal_elv	own_stat_d	owner_d
owner_ty_d	project_id	pump_elv	sta_cpty	sta_length	sta_ty_d
sta_width					

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**ENTITY TYPE NAME** fuel\_pump\_point

**ENTITY CLASS NAME** utilities\_fuel\_system

**OBJECT TYPE** Point

**DEFINITION** A mechanical device that draws material into itself through an entrance port and forces the material out through an exhaust port.

**Attribute Name**

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buildng_id	cool_mth_d	cptcy_rate	date_acqrd	dispostn_d	elv_u_d
facil_id	flow_u_d	fulstat_id	fulzone_id	manuf_id	model_no
narrative	observ_id	outflw_act	own_stat_d	owner_d	owner_ty_d
pip_out_id	pipe_in_id	prim_rqd_d	prime_meth	project_id	pump_elv
pump_hp	pump_id	serial_no	type_d	use_d	

---

**ENTITY TYPE NAME** fuel\_rectifier\_point

**ENTITY CLASS NAME** utilities\_fuel\_system

**OBJECT TYPE** Point

**DEFINITION** A device that changes alternating current to direct current for an impressed current cathodic protection system on an element of the distribution system.

**Attribute Name**

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cool_mth_d	currnt_out	currnt_u_d	encl_typ_d	facil_id	int_mtr_d
narrative	no_phases	phas_ltr_d	rect_id	volt_in_d	volt_out_d

---

**ENTITY TYPE NAME** fuel\_regulator\_reducer\_point

**ENTITY CLASS NAME** utilities\_fuel\_system

**OBJECT TYPE** Point

**DEFINITION** A pressure regulator automatically reduces the pressure on the downstream side of the valve to a preset magnitude.

**Attribute Name**

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buildng_id	date_acqrd	dispostn_d	facil_id	fulmnhl_id	fulstat_id
fulzone_id	manuf_id	model_no	narrative	own_stat_d	owner_d
owner_ty_d	pip_out_id	pipe_in_id	press_in	press_out	press_reqd
press_u_d	project_id	reg_id	serial_no	size_d	type_d

---

**ENTITY TYPE NAME** fuel\_source\_point

**ENTITY CLASS NAME** utilities\_fuel\_system

**OBJECT TYPE** Point

**DEFINITION** The point from which the utility is supplied a product for processing and distribution.

**Attribute Name**

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buildng_id	date_acqrd	dispostn_d	facil_id	name_d	narrative
own_stat_d	owner_d	owner_ty_d	project_id	source_id	type_d

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**ENTITY TYPE NAME** fuel\_tank\_point

**ENTITY CLASS NAME** utilities\_fuel\_system

**OBJECT TYPE** Point

**DEFINITION** An above or below grade receptacle or chamber for holding components on a temporary basis prior to transfer or use.

**Attribute Name**

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alt_vlv_d	area_u_d	buildng_id	cptcy_u_d	date_acqrd	dim_u_d
dispostn_d	elv_u_d	facil_id	fuel_ty_d	fulzone_id	head_norm
head_u_d	invert_elv	manuf_id	mat_d	model_no	narrative
ovrlfw_elv	own_stat_d	owner_d	owner_ty_d	permit_no	press_norm
press_u_d	project_id	rim_elv	serial_no	tank_cpty	tank_dia
tank_id	tank_lgth	tank_st_d	tank_use_d	tank_width	

---

**ENTITY TYPE NAME** fuel\_valve\_point

**ENTITY CLASS NAME** utilities\_fuel\_system

**OBJECT TYPE** Point

**DEFINITION** A fitting or device used for shutting or throttling flow through a line.

**Attribute Name**

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date_acqrd	dispostn_d	elv_u_d	facil_id	fulmnhl_id	fulpipe_id
fulzone_id	manuf_id	narrative	own_stat_d	owner_d	owner_ty_d
project_id	use_d	valve_elv	valve_id	vlev_dia_d	vlev_st_d

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**ENTITY TYPE NAME** heat\_cool\_anchor\_point

**ENTITY CLASS NAME** utilities\_heat\_cool\_system

**OBJECT TYPE** Point

**DEFINITION** A structure, typically concrete, used to either guide the expansion of pipes or used to fix the movement of some part of the expansion section.

**Attribute Name**

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anch_typ_d	anchor_id	facil_id	hcspipe_id	narrative
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**ENTITY TYPE NAME** heat\_cool\_anode\_point

**ENTITY CLASS NAME** utilities\_heat\_cool\_system

**OBJECT TYPE** Point

**DEFINITION** A device used in utility distribution systems that is electrically connected to a less electrolytically active material so that it will oxidize in the place of the less active material.

**Attribute Name**

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anode_wght	facil_id	hesanod_id	material_d	narrative	wght_u_d
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**ENTITY TYPE NAME** heat\_cool\_anode\_test\_station\_point

**ENTITY CLASS NAME** utilities\_heat\_cool\_system

**OBJECT TYPE** Point

**DEFINITION** A central location where anodes are tested for performance.

**Attribute Name**

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facil_id	hcsant_id	insl_typ_d	narrative	no_term	type_d
wire_siz_d	wire_typ_d				

---

**ENTITY TYPE NAME** heat\_cool\_fitting\_point

**ENTITY CLASS NAME** utilities\_heat\_cool\_system

**OBJECT TYPE** Point

**DEFINITION** A fitting is an item used to connect, cap, plug or otherwise attach to a pipe.

**Attribute Name**

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buildng_id	date_acqrd	dia_in	dia_u_d	dim_u_d	dispostn_d
elv_u_d	facil_id	fit_elv	fit_lgth	fit_width	ground_elv
hesfitt_id	hespipe_id	heszone_id	manuf_id	mat_d	model_no
narrative	own_stat_d	owner_d	owner_ty_d	project_id	serial_no
size_d	size_u_d	type_d			

---

**ENTITY TYPE NAME** heat\_cool\_junction\_point

**ENTITY CLASS NAME** utilities\_heat\_cool\_system

**OBJECT TYPE** Point

**DEFINITION** A box or small vault (usually concrete, brick, or cast iron) located below grade with above grade access where pipes intersect. The manhole also houses associated fittings, valves, meters, etc.

**Attribute Name**

---

airrfvlv_d	buildng_id	dim_u_d	dispostn_d	drain_ty_d	elv_u_d
facil_id	ground_elv	hcsmnhl_id	hcszone_id	invert_elv	manuf_id
mat_d	mh_dia	mh_length	mh_width	model_no	narrative
no_pipes	no_valves	own_stat_d	owner_d	owner_ty_d	project_id
rim_elv	type_d	use_d			

---

**ENTITY TYPE NAME** heat\_cool\_line

**ENTITY CLASS NAME** utilities\_heat\_cool\_system

**OBJECT TYPE** String/Chain

**DEFINITION** A pipe used to carry a substance from location to location (main line, service line, vent line, etc).

## Utilities: Entity Types and Attributes

---

<b>Attribute Name</b>					
buildng_id	catprot_d	date_acqrd	dim_u_d	dispostn_d	elv_u_d
facil_id	frcoord_x	frcoord_y	grnd_elv_1	grnd_elv_2	hcspipe_id
hcsplnt_id	hcszone_id	inv_elv_1	inv_elv_2	manuf_id	mat_d
model_no	narrative	own_stat_d	owner_d	owner_ty_d	pipe_lgth
press_max	press_norm	press_u_d	project_id	size_d	slope_bot
slope_u_d	tape_d	tocoord_x	tocoord_y	tocoord_z	type_d
use_d					

---

**ENTITY TYPE NAME** `heat_cool_marker_point`

**ENTITY CLASS NAME** `utilities_heat_cool_system`

**OBJECT TYPE** Point

**DEFINITION** A sign, concrete monument, etc., installed either directly above or immediately adjacent equipment marking its location.

<b>Attribute Name</b>					
buildng_id	date_acqrd	dim_u_d	dispostn_d	facil_id	manuf_id
marker_id	model_no	narrative	own_stat_d	owner_d	owner_ty_d
pole_depth	pole_hght	pole_mat_d	project_id	rock_cnd_d	sign_hgth
sign_mat_d	sign_text	sign_width	soil_cnd_d	type_d	

---

**ENTITY TYPE NAME** `heat_cool_meter_point`

**ENTITY CLASS NAME** `utilities_heat_cool_system`

**OBJECT TYPE** Point

**DEFINITION** A device installed in a line for measuring the quantity and or rate of water to a facility or through a section of line.

<b>Attribute Name</b>					
buildng_id	date_acqrd	dispostn_d	elv_u_d	facil_id	ground_elv
hcsmetr_id	hcsmnhl_id	hcspipe_id	hcszone_id	instl_ty_d	manuf_id
meter_elv	model_no	mtr_custmr	narrative	own_stat_d	owner_d
owner_ty_d	project_id	serial_no	size_d	size_u_d	srvc_mtr_d
type_d					

---

**ENTITY TYPE NAME** `heat_cool_plant_area`

**ENTITY CLASS NAME** `utilities_heat_cool_system`

**OBJECT TYPE** G/GT Polygon

**DEFINITION** A building or structure containing boilers, furnaces, chillers, pumps and appurtenant equipment to produce the water temperature/pressure combinations which are distributed to other buildings and facilities.

## Utilities: Entity Types and Attributes

---

<b>Attribute Name</b>					
area_u_d	buildng_id	cap_c_u_d	cap_h_u_d	capac_cool	capac_heat
date_acqrd	dim_u_d	dispostn_d	elv_u_d	facil_id	ground_elv
hcsplnt_id	name_d	narrative	own_stat_d	owner_d	owner_ty_d
perim_u_d	plant_elv	plant_lgth	plantwidth	press_cool	press_heat
press_u_d	prod_typ_d	project_id	temp_cool	temp_heat	temp_u_d
type_d					

---

**ENTITY TYPE NAME** `heat_cool_pump_point`

**ENTITY CLASS NAME** `utilities_heat_cool_system`

**OBJECT TYPE** Point

**DEFINITION** A mechanical device that draws material into itself through an entrance port and forces the material out through an exhaust port.

<b>Attribute Name</b>					
buildng_id	cool_mth_d	cpcty_act	cpcty_rate	cpcty_u_d	date_acqrd
dispostn_d	elv_u_d	facil_id	ground_elv	hespump_id	hcszone_id
manuf_id	model_no	narrative	observ_id	own_stat_d	owner_d
owner_ty_d	pip_out_id	pipe_in_id	prim_rqd_d	prime_meth	project_id
pump_elv	pwr_req_d	serial_no	tdh_rated	tdh_u_d	type_d
use_d					

---

**ENTITY TYPE NAME** `heat_cool_rectifier_point`

**ENTITY CLASS NAME** `utilities_heat_cool_system`

**OBJECT TYPE** Point

**DEFINITION** A device that changes alternating current to direct current for an impressed current cathodic protection system.

<b>Attribute Name</b>					
cool_mth_d	currnt_out	currnt_u_d	encl_typ_d	facil_id	hcsrect_id
int_mtr_d	narrative	no_phases	phas_ltr_d	volt_in_d	volt_out_d

---

**ENTITY TYPE NAME** `heat_cool_regulator_point`

**ENTITY CLASS NAME** `utilities_heat_cool_system`

**OBJECT TYPE** Point

**DEFINITION** A pressure regulator automatically reduces the pressure on the downstream side of the valve to a preset magnitude.

<b>Attribute Name</b>					
buildng_id	date_acqrd	dispostn_d	elv_u_d	facil_id	ground_elv
hcsmnhl_id	hesreg_id	hcszone_id	manuf_id	model_no	narrative
own_stat_d	owner_d	owner_ty_d	pip_out_id	pipe_in_id	press_in
press_out	press_reqd	press_u_d	project_id	reg_elv	serial_no
size_d	type_d				

## Utilities: Entity Types and Attributes

---

**ENTITY TYPE NAME** `heat_cool_valve_point`

**ENTITY CLASS NAME** `utilities_heat_cool_system`

**OBJECT TYPE** Point

**DEFINITION** A fitting or device used for shutting or throttling flow through a line.

**Attribute Name**

---

<code>date_acqrd</code>	<code>dispostn_d</code>	<code>elv_u_d</code>	<code>facil_id</code>	<code>ground_elv</code>	<code>hcsmnhl_id</code>
<code>hcspipe_id</code>	<code>hcsvlv_id</code>	<code>hcszone_id</code>	<code>manuf_id</code>	<code>narrative</code>	<code>own_stat_d</code>
<code>owner_d</code>	<code>owner_ty_d</code>	<code>project_id</code>	<code>size_u_d</code>	<code>use_d</code>	<code>valve_elv</code>
<code>vlv_size</code>	<code>vlv_st_d</code>				

---

**ENTITY TYPE NAME** `industrial_waste_discharge_point`

**ENTITY CLASS NAME** `utilities_industrial_system`

**OBJECT TYPE** Point

**DEFINITION** Any location where industrial waste water pipes directly discharge effluent.

**Attribute Name**

---

<code>buildng_id</code>	<code>date_acqrd</code>	<code>dischrg_id</code>	<code>dispostn_d</code>	<code>facil_id</code>	<code>inwdsct_id</code>
<code>inwpipe_id</code>	<code>inwpplnt_id</code>	<code>inwtank_id</code>	<code>narrative</code>	<code>own_stat_d</code>	<code>owner_d</code>
<code>owner_ty_d</code>	<code>project_id</code>	<code>tribut_cod</code>	<code>type_d</code>		

---

**ENTITY TYPE NAME** `industrial_waste_fitting_point`

**ENTITY CLASS NAME** `utilities_industrial_system`

**OBJECT TYPE** Point

**DEFINITION** A fitting is an item used to connect, cap, plug or otherwise alter a pipe.

**Attribute Name**

---

<code>buildng_id</code>	<code>date_acqrd</code>	<code>dim_u_d</code>	<code>dispostn_d</code>	<code>facil_id</code>	<code>fit_depth</code>
<code>fit_lgth</code>	<code>fit_width</code>	<code>inwdscet_id</code>	<code>inwfitt_id</code>	<code>inwpipe_id</code>	<code>inwsect_id</code>
<code>manuf_id</code>	<code>mat_d</code>	<code>model_no</code>	<code>narrative</code>	<code>own_stat_d</code>	<code>owner_d</code>
<code>owner_ty_d</code>	<code>project_id</code>	<code>serial_no</code>	<code>size_d</code>	<code>tribut_cod</code>	<code>type_d</code>

---

**ENTITY TYPE NAME** `industrial_waste_grit_chamber_point`

**ENTITY CLASS NAME** `utilities_industrial_system`

**OBJECT TYPE** Point

**DEFINITION** A chamber designed to remove sand, gravel, or other heavy solids that have subsiding velocities or specific gravities substantially greater than those of the organic solids in the waste water.

**Attribute Name**

---

<code>cpcy_u_d</code>	<code>date_acqrd</code>	<code>dispostn_d</code>	<code>facil_id</code>	<code>flow_u_d</code>	<code>flowcpcy</code>
<code>grit_type</code>	<code>inwdsct_id</code>	<code>inwgrtc_id</code>	<code>inwpplnt_id</code>	<code>manuf_id</code>	<code>narrative</code>
<code>o_w_sep_d</code>	<code>own_stat_d</code>	<code>owner_d</code>	<code>owner_ty_d</code>	<code>pip_out_id</code>	<code>pipe_in_id</code>
<code>project_id</code>	<code>stor_cpcy</code>	<code>tribut_cod</code>			

## Utilities: Entity Types and Attributes

---

**ENTITY TYPE NAME** industrial\_waste\_inlet\_point

**ENTITY CLASS NAME** utilities\_industrial\_system

**OBJECT TYPE** Point

**DEFINITION** The location where water is collected and received into the utility system.

**Attribute Name**

---

cpty_dgn	date_acqrd	dispostn_d	elv_u_d	facil_id	flow_u_d
inlet_st_d	invert_elv	inwdscet_id	inwinlt_id	inwpipe_id	manuf_id
model_no	narrative	own_stat_d	owner_d	owner_ty_d	project_id
tribut_cod	weir_elv				

---

**ENTITY TYPE NAME** industrial\_waste\_junction\_point

**ENTITY CLASS NAME** utilities\_industrial\_system

**OBJECT TYPE** Point

**DEFINITION** A box or small vault (usually concrete, brick, or cast iron) located below grade with above grade access where pipes intersect. The manhole also houses associated fittings, valves, meters, etc.

**Attribute Name**

---

buildng_id	dim_u_d	dispostn_d	drain_ty_d	elv_u_d	facil_id
invert_elv	inwdscet_id	inwmnchl_id	liner_ty_d	manuf_id	mat_d
mh_dia	mh_length	mh_width	model_no	narrative	neut_agent
no_pipes	own_stat_d	owner_d	owner_ty_d	project_id	reactant
rim_elv	tribut_cod	type_d	use_d		

---

**ENTITY TYPE NAME** industrial\_waste\_lagoon\_area

**ENTITY CLASS NAME** utilities\_industrial\_system

**OBJECT TYPE** G/GT Polygon

**DEFINITION** A shallow man made pool or pond for the purpose of holding industrial waste.

**Attribute Name**

---

aerator_d	aeratr_pow	area_u_d	basin_id	date_acqrd	date_anl
date_const	depth_avg	dim_u_d	dischrg_id	elv_u_d	facil_id
freq_u_d	hp_u_d	inv_elv_av	inwdscet_id	inwlgon_id	inwplnt_id
lab_name_d	lab_ty_d	lgn_length	lgn_width	manage_off	manuf_id
mon_agency	name_d	narrative	no_pipes_i	no_pipes_o	no_pumps
out_cntr	own_stat_d	owner_d	owner_ty_d	perim_u_d	pip_out_id
pip_outl_d	pipe_in_id	project_id	smpl_freq	soil_cdn_d	soil_ero_d
soil_fam_d	soil_tex_d	test_ty_d	tribut_cod	type_d	user_ind_d
user_san_d	weir_id	wer_outl_d	x_dikes_d		

---

**ENTITY TYPE NAME** industrial\_waste\_line

**ENTITY CLASS NAME** utilities\_industrial\_system

**OBJECT TYPE** String/Chain

**DEFINITION** A pipe used to carry a substance from location to location (main line, service line, vent line, etc).

## Utilities: Entity Types and Attributes

---

<b>Attribute Name</b>					
buildng_id	date_acqrd	dim_u_d	dispostn_d	drng_pat_d	drng_tex_d
elv_u_d	facil_id	frcoord_x	frcoord_y	inv_elv_1	inv_elv_2
inwdscet_id	inwpipe_id	inwplnt_id	inwsect_id	inwstat_id	inwtank_id
lined_d	manuf_id	mat_d	model_no	narrative	own_stat_d
owner_d	owner_ty_d	pipe_lgth	press_max	press_norm	press_u_d
project_id	size_d	slope_bot	slope_u_d	tocoord_x	tocoord_y
tocoord_z	tribut_cod	type_d	use_d		

---

**ENTITY TYPE NAME** industrial\_waste\_marker\_point

**ENTITY CLASS NAME** utilities\_industrial\_system

**OBJECT TYPE** Point

**DEFINITION** A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc.

<b>Attribute Name</b>					
buildng_id	date_acqrd	dim_u_d	dispostn_d	facil_id	manuf_id
marker_id	model_no	narrative	own_stat_d	owner_d	owner_ty_d
pole_depth	pole_hght	pole_mat_d	project_id	rock_cnd_d	sign_hgth
sign_mat_d	sign_text	sign_width	soil_cnd_d	type_d	

---

**ENTITY TYPE NAME** industrial\_waste\_meter\_point

**ENTITY CLASS NAME** utilities\_industrial\_system

**OBJECT TYPE** Point

**DEFINITION** A device installed in a line for measuring the quantity and or rate of waste through a section of line.

<b>Attribute Name</b>					
buildng_id	date_acqrd	design_d	dim_u_d	dispostn_d	elv_u_d
facil_id	ground_elv	instl_ty_d	inwdscet_id	inwmetr_id	inwmnchl_id
inwpipe_id	manuf_id	meter_elv	model_no	mtr_depth	mtr_length
mtr_width	narrative	own_stat_d	owner_d	owner_ty_d	project_id
serial_no	size_d	type_d			

---

**ENTITY TYPE NAME** industrial\_waste\_neutralizer\_point

**ENTITY CLASS NAME** utilities\_industrial\_system

**OBJECT TYPE** Point

**DEFINITION** A receptacle or chamber, which by chemical reactions with reactant materials in the receptacle, makes liquid waste passing through the receptacle chemically neutral.

## Utilities: Entity Types and Attributes

---

<b>Attribute Name</b>					
buildng_id	dim_u_d	dispostn_d	drain_ty_d	elv_u_d	facil_id
invert_elv	inwdsct_id	liner_ty_d	manuf_id	mat_d	model_no
narrative	neut_agent	neut_dia	neut_id	neut_lngth	neut_width
no_pipes	own_stat_d	owner_d	owner_ty_d	project_id	reactant
rim_elv	tribut_cod	type_d			

---

**ENTITY TYPE NAME** `industrial_waste_oil_water_separator_point`

**ENTITY CLASS NAME** `utilities_industrial_system`

**OBJECT TYPE** Point

**DEFINITION** A device or structure placed in the waste stream to separate water from oil products.

<b>Attribute Name</b>					
cpcy_u_d	date_acqrd	date_per_x	disposal	dispostn_d	facil_id
flow_u_d	flowcpcy	grtchbr_d	inwdsct_id	inwpnt_id	inwsep_id
inwstat_id	inwtank_id	manuf_id	narrative	oil_cpcy	own_stat_d
owner_d	owner_ty_d	permit_no	pip_out_id	pipe_in_id	project_id
sep_code	sep_contnt	sep_name	sep_process	sep_volume	temp_optim
temp_u_d	tribut_cod	type_d	vol_u_d		

---

**ENTITY TYPE NAME** `industrial_waste_pump_point`

**ENTITY CLASS NAME** `utilities_industrial_system`

**OBJECT TYPE** Point

**DEFINITION** A mechanical device that draws material into itself through an entrance port and forces the material out through an exhaust port.

<b>Attribute Name</b>					
buildng_id	cool_mth_d	cpcy_act	cpcy_rate	cpcy_u_d	date_acqrd
dispostn_d	elv_u_d	facil_id	inwdsct_id	inwpnt_id	inwpump_id
inwstat_id	manuf_id	model_no	narrative	own_stat_d	owner_d
owner_ty_d	pip_out_id	pipe_in_id	prim_rqd_d	prime_meth	project_id
pump_elv	pump_hp	serial_no	tribut_cod	type_d	use_d

---

**ENTITY TYPE NAME** `industrial_waste_pump_station_ejector_point`

**ENTITY CLASS NAME** `utilities_industrial_system`

**OBJECT TYPE** Point

**DEFINITION** A building in which one or more pumps operate to supply material flowing at adequate pressure to or from a distribution system.

## Utilities: Entity Types and Attributes

---

<b>Attribute Name</b>					
alrmvlvlev	buildng_id	cond_d	cpty_u_d	date_acqrd	design_d
dim_u_d	dispostn_d	elv_u_d	facil_id	hi_wat_elv	inwdscet_id
inwplnt_id	inwstat_id	narrative	no_pumps	nodal_elv	own_stat_d
owner_d	owner_ty_d	project_id	sta_length	sta_width	tribut_cod
type_d	wetwlcpcty				

---

**ENTITY TYPE NAME** industrial\_waste\_tank\_point

**ENTITY CLASS NAME** utilities\_industrial\_system

**OBJECT TYPE** Point

**DEFINITION** An above or below grade receptacle or chamber for holding components on a temporary basis prior to transfer or use.

<b>Attribute Name</b>					
alt_vlv_d	area_u_d	buildng_id	cpty_u_d	date_acqrd	dim_u_d
dispostn_d	elv_u_d	facil_id	head_norm	head_u_d	invert_elv
inwdscet_id	inwtank_id	manuf_id	mat_d	model_no	narrative
ovrlfw_elv	own_stat_d	owner_d	owner_ty_d	permit_no	project_id
serial_no	tank_cpty	tank_depth	tank_dia	tank_lgth	tank_st_d
tank_width	top_elv	tribut_cod	use_d		

---

**ENTITY TYPE NAME** industrial\_waste\_treatment\_plant\_area

**ENTITY CLASS NAME** utilities\_industrial\_system

**OBJECT TYPE** G/GT Polygon

**DEFINITION** Equipment; or a structure containing equipment, processes, piping, or components; used to treat and remove unwanted constituents.

<b>Attribute Name</b>					
area_u_d	buildng_id	bypass_d	cond_d	date_acqrd	dim_u_d
dispostn_d	elv_u_d	facil_id	flow_act	flow_rate	flow_u_d
inwplnt_id	name_d	narrative	no_pumps	own_stat_d	owner_d
owner_ty_d	perim_u_d	plant_elv	plant_lgth	plantwidth	project_id
type_d					

---

**ENTITY TYPE NAME** industrial\_waste\_valve\_point

**ENTITY CLASS NAME** utilities\_industrial\_system

**OBJECT TYPE** Point

**DEFINITION** A fitting or device used for shutting or throttling flow through a line.

<b>Attribute Name</b>					
date_acqrd	dispostn_d	elv_u_d	facil_id	inwplnt_id	inwdscet_id
inwmnchl_id	inwpipe_id	inwvlv_id	manuf_id	narrative	own_stat_d
owner_d	owner_ty_d	project_id	size_d	tribut_cod	use_d
valve_elv	vlv_st_d				

## Utilities: Entity Types and Attributes

---

**ENTITY TYPE NAME** natural\_gas\_anode\_point

**ENTITY CLASS NAME** utilities\_natural\_gas\_system

**OBJECT TYPE** Point

**DEFINITION** A material used for utility distribution systems that is electrically connected to a less electrolytically active material so that it will oxidize in the place of the less active material.

**Attribute Name**

---

anode_id	anode_wght	facil_id	material_d	narrative	wght_u_d
----------	------------	----------	------------	-----------	----------

---

**ENTITY TYPE NAME** natural\_gas\_anode\_test\_station\_point

**ENTITY CLASS NAME** utilities\_natural\_gas\_system

**OBJECT TYPE** Point

**DEFINITION** A central location where anodes are tested for performance.

**Attribute Name**

---

facil_id	insl_typ_d	narrative	no_term	tst_sta_id	type_d
wire_siz_d	wire_typ_d				

---

**ENTITY TYPE NAME** natural\_gas\_fill\_point

**ENTITY CLASS NAME** utilities\_natural\_gas\_system

**OBJECT TYPE** Point

**DEFINITION** Location where gas is control discharged to users.

**Attribute Name**

---

buildng_id	date_acqrd	dia_u_d	dispostn_d	elv_u_d	facil_id
gas_ty_d	gaspipe_id	gasvlv_id	gaszone_id	hyd_elv	hyd_ty_d
hydrant_id	manuf_id	model_no	narrative	outcon1dia	outcon2dia
outcon3dia	own_stat_d	owner_d	owner_ty_d	press_resd	press_stat
press_u_d	project_id	source_d	vlv_st_d		

---

**ENTITY TYPE NAME** natural\_gas\_fitting\_point

**ENTITY CLASS NAME** utilities\_natural\_gas\_system

**OBJECT TYPE** Point

**DEFINITION** Hardware used to cap, plug, or join pieces of pipe.

**Attribute Name**

---

buildng_id	date_acqrd	dim_u_d	dispostn_d	facil_id	fit_length
fit_width	gasfitt_id	gaspipe_id	gassect_id	gaszone_id	manuf_id
mat_d	model_no	narrative	own_stat_d	owner_d	owner_ty_d
project_id	serial_no	size_d	type_d		

## Utilities: Entity Types and Attributes

---

**ENTITY TYPE NAME** natural\_gas\_junction\_point

**ENTITY CLASS NAME** utilities\_natural\_gas\_system

**OBJECT TYPE** Point

**DEFINITION** A box or small vault (usually concrete, brick, or cast iron) located below grade with above grade access where pipes intersect. The manhole also houses associated fittings, valves, meters, etc.

### Attribute Name

---

airrfvlv_d	buildng_id	dim_u_d	dispostn_d	drain_ty_d	elv_u_d
facil_id	gasmnhl_id	gaszone_id	invert_elv	manuf_id	mat_d
mh_dia	mh_length	mh_width	model_no	narrative	no_pipes
no_valves	own_stat_d	owner_d	owner_ty_d	project_id	rim_elv
type_d	use_d				

---

**ENTITY TYPE NAME** natural\_gas\_light\_point

**ENTITY CLASS NAME** utilities\_natural\_gas\_system

**OBJECT TYPE** Point

**DEFINITION** A point graphic representing the location of a gas light fixture. A gas light fixture utilizes gas as its energy source and contains a flame used for illumination of an area.

### Attribute Name

---

buildng_id	date_acqrd	dispostn_d	facil_id	fix_height	fix_ty_d
fix_use_d	fixture_id	gas_ty_d	gasstat_id	gaszone_id	hght_u_d
manuf_id	model_no	narrative	own_stat_d	owner_d	owner_ty_d
pole_id	project_id	rate_u_d	use_rate		

---

**ENTITY TYPE NAME** natural\_gas\_line

**ENTITY CLASS NAME** utilities\_natural\_gas\_system

**OBJECT TYPE** String/Chain

**DEFINITION** A pipe used to carry a substance from location to location (main line, service line, vent line, etc).

### Attribute Name

---

buildng_id	catprot_d	date_acqrd	dim_u_d	dispostn_d	elv_u_d
facil_id	frcoord_x	frcoord_y	gas_ty_d	gaspipe_id	gassect_id
gassrce_id	gasstat_id	gastank_id	gaszone_id	inv_elv_1	inv_elv_2
manuf_id	mat_d	model_no	narrative	own_stat_d	owner_d
owner_ty_d	pipe_lgth	press_max	press_norm	press_u_d	project_id
size_d	source_d	tocoord_x	tocoord_y	tocoord_z	type_d
use_d					

---

**ENTITY TYPE NAME** natural\_gas\_marker\_point

**ENTITY CLASS NAME** utilities\_natural\_gas\_system

**OBJECT TYPE** Point

**DEFINITION** A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc.

## Utilities: Entity Types and Attributes

---

<b>Attribute Name</b>					
buildng_id	date_acqrd	dim_u_d	dispostn_d	facil_id	manuf_id
marker_id	model_no	narrative	own_stat_d	owner_d	owner_ty_d
pole_depth	pole_hght	pole_mat_d	project_id	rock_cnd_d	sign_hgth
sign_mat_d	sign_text	sign_width	soil_cnd_d	type_d	

---

**ENTITY TYPE NAME** `natural_gas_meter_point`

**ENTITY CLASS NAME** `utilities_natural_gas_system`

**OBJECT TYPE** Point

**DEFINITION** A device installed in a line for measuring the quantity and or rate of gas to a facility or through a section of line.

<b>Attribute Name</b>					
buildng_id	date_acqrd	dia_u_d	dispostn_d	elv_u_d	facil_id
gasmetr_id	gasmnhl_id	gaspipe_id	gaszone_id	instl_ty_d	manuf_id
meter_elv	model_no	mtr_custmr	narrative	own_stat_d	owner_d
owner_ty_d	project_id	serial_no	size_d	source_d	srvc_mtr_d
type_d					

---

**ENTITY TYPE NAME** `natural_gas_pump_point`

**ENTITY CLASS NAME** `utilities_natural_gas_system`

**OBJECT TYPE** Point

**DEFINITION** A mechanical device that draws material into itself through an entrance port and forces the material out through an exhaust port.

<b>Attribute Name</b>					
buildng_id	cool_mth_d	date_acqrd	dispostn_d	elv_u_d	facil_id
flow_rate	flow_u_d	gaspump_id	gassrce_id	gasstat_id	gaszone_id
manuf_id	model_no	narrative	observ_id	outflw_act	own_stat_d
owner_d	owner_ty_d	pip_out_id	pipe_in_id	prim_rqd_d	prime_meth
project_id	pump_elv	pump_hp	serial_no	type_d	use_d

---

**ENTITY TYPE NAME** `natural_gas_pump_station_point`

**ENTITY CLASS NAME** `utilities_natural_gas_system`

**OBJECT TYPE** Point

**DEFINITION** A building in which one or more pumps operate to supply material flowing at adequate pressure to or from a distribution system.

<b>Attribute Name</b>					
buildng_id	cond_d	cpty_almr	cpty_u_d	date_acqrd	dim_u_d
dispostn_d	elv_u_d	facil_id	gasstat_id	gaszone_id	narrative
no_pumps	nodal_elv	own_stat_d	owner_d	owner_ty_d	press_oper
press_out	press_u_d	project_id	source_d	sta_cpty	sta_length
sta_ty_d	sta_width				

## Utilities: Entity Types and Attributes

---

**ENTITY TYPE NAME** `natural_gas_rectifier_point`

**ENTITY CLASS NAME** `utilities_natural_gas_system`

**OBJECT TYPE** Point

**DEFINITION** A device that changes alternating current to direct current for an impressed current cathodic protection system on an element of the distribution system.

**Attribute Name**

---

<code>cool_mth_d</code>	<code>currnt_out</code>	<code>currnt_u_d</code>	<code>encl_typ_d</code>	<code>facil_id</code>	<code>gasrect_id</code>
<code>int_mtr_d</code>	<code>narrative</code>	<code>no_phases</code>	<code>phas_ltr_d</code>	<code>volt_in_d</code>	<code>volt_out_d</code>

---

**ENTITY TYPE NAME** `natural_gas_regulator_reducer_point`

**ENTITY CLASS NAME** `utilities_natural_gas_system`

**OBJECT TYPE** Point

**DEFINITION** A pressure regulator automatically reduces the pressure on the downstream side of the valve to a preset magnitude.

**Attribute Name**

---

<code>buildng_id</code>	<code>date_acqrd</code>	<code>dispostn_d</code>	<code>facil_id</code>	<code>gasmnhl_id</code>	<code>gasreg_id</code>
<code>gasstat_id</code>	<code>gaszone_id</code>	<code>manuf_id</code>	<code>model_no</code>	<code>narrative</code>	<code>own_stat_d</code>
<code>owner_d</code>	<code>owner_ty_d</code>	<code>pip_out_id</code>	<code>pipe_in_id</code>	<code>press_in</code>	<code>press_out</code>
<code>press_reqd</code>	<code>press_u_d</code>	<code>project_id</code>	<code>serial_no</code>	<code>size_d</code>	<code>type_d</code>

---

**ENTITY TYPE NAME** `natural_gas_source_point`

**ENTITY CLASS NAME** `utilities_natural_gas_system`

**OBJECT TYPE** Point

**DEFINITION** The point from which the utility is supplied a product for processing and distribution.

**Attribute Name**

---

<code>buildng_id</code>	<code>date_acqrd</code>	<code>dispostn_d</code>	<code>facil_id</code>	<code>gassrce_id</code>	<code>name_d</code>
<code>narrative</code>	<code>own_stat_d</code>	<code>owner_d</code>	<code>owner_ty_d</code>	<code>project_id</code>	<code>type_d</code>

---

**ENTITY TYPE NAME** `natural_gas_tank_point`

**ENTITY CLASS NAME** `utilities_natural_gas_system`

**OBJECT TYPE** Point

**DEFINITION** An above or below grade receptacle or chamber for holding components on a temporary basis prior to transfer or use.

**Attribute Name**

---

<code>alt_vlv_d</code>	<code>area_u_d</code>	<code>buildng_id</code>	<code>cptcy_u_d</code>	<code>date_acqrd</code>	<code>dim_u_d</code>
<code>dispostn_d</code>	<code>elv_u_d</code>	<code>facil_id</code>	<code>gastank_id</code>	<code>gaszone_id</code>	<code>head_norm</code>
<code>head_u_d</code>	<code>invert_elv</code>	<code>manuf_id</code>	<code>mat_d</code>	<code>model_no</code>	<code>narrative</code>
<code>ovrlfw_elv</code>	<code>own_stat_d</code>	<code>owner_d</code>	<code>owner_ty_d</code>	<code>permit_no</code>	<code>press_norm</code>
<code>press_u_d</code>	<code>project_id</code>	<code>serial_no</code>	<code>tank_cptcy</code>	<code>tank_dia</code>	<code>tank_lgth</code>
<code>tank_st_d</code>	<code>tank_use_d</code>	<code>tank_width</code>	<code>top_elv</code>		

## Utilities: Entity Types and Attributes

---

**ENTITY TYPE NAME** `natural_gas_valve_point`

**ENTITY CLASS NAME** `utilities_natural_gas_system`

**OBJECT TYPE** Point

**DEFINITION** A fitting or device used for shutting or throttling flow through a line.

**Attribute Name**

---

<code>branch_sys</code>	<code>date_acqrd</code>	<code>dispostn_d</code>	<code>elv_u_d</code>	<code>facil_id</code>	<code>gasmnhl_id</code>
<code>gaspipe_id</code>	<code>gasvlv_id</code>	<code>gaszone_id</code>	<code>manuf_id</code>	<code>narrative</code>	<code>own_stat_d</code>
<code>owner_d</code>	<code>owner_ty_d</code>	<code>project_id</code>	<code>use_d</code>	<code>valve_elv</code>	<code>vlv_dia_d</code>
<code>vlv_st_d</code>					

---

**ENTITY TYPE NAME** `storm_sewer_armor_point`

**ENTITY CLASS NAME** `utilities_storm_system`

**OBJECT TYPE** Point

**DEFINITION** Any location where armor stone is used for erosion protection in an open channel.

**Attribute Name**

---

<code>arm_length</code>	<code>armor_id</code>	<code>armor_ty_d</code>	<code>basin_id</code>	<code>bed_mat_d</code>	<code>bot_width</code>
<code>date_acqrd</code>	<code>dim_u_d</code>	<code>dispostn_d</code>	<code>elv_u_d</code>	<code>facil_id</code>	<code>frcoord_x</code>
<code>frcoord_y</code>	<code>inv_elv_1</code>	<code>inv_elv_2</code>	<code>narrative</code>	<code>own_stat_d</code>	<code>owner_d</code>
<code>owner_ty_d</code>	<code>project_id</code>	<code>reach_name</code>	<code>slope_bot</code>	<code>slope_left</code>	<code>slope_right</code>
<code>slope_u_d</code>	<code>stochan_id</code>	<code>tocoord_x</code>	<code>tocoord_y</code>	<code>tocoord_z</code>	<code>top_width</code>

---

**ENTITY TYPE NAME** `storm_sewer_culvert_line`

**ENTITY CLASS NAME** `utilities_storm_system`

**OBJECT TYPE** String/Chain

**DEFINITION** Interception and removal of ground water or surface water.

**Attribute Name**

---

<code>basin_id</code>	<code>buildng_id</code>	<code>date_acqrd</code>	<code>dim_u_d</code>	<code>dispostn_d</code>	<code>drng_pat_d</code>
<code>drng_tx_d</code>	<code>drng_zon_d</code>	<code>elv_u_d</code>	<code>facil_id</code>	<code>frcoord_x</code>	<code>frcoord_y</code>
<code>inv_elv_1</code>	<code>inv_elv_2</code>	<code>lined_d</code>	<code>manuf_id</code>	<code>mat_d</code>	<code>model_no</code>
<code>narrative</code>	<code>own_stat_d</code>	<code>owner_d</code>	<code>owner_ty_d</code>	<code>pipe_lgth</code>	<code>pipe_width</code>
<code>press_max</code>	<code>press_norm</code>	<code>press_u_d</code>	<code>project_id</code>	<code>scrn_ty_d</code>	<code>size_d</code>
<code>slope_bot</code>	<code>slope_u_d</code>	<code>stodcrg_id</code>	<code>stopipe_id</code>	<code>stosect_id</code>	<code>stostat_id</code>
<code>tocoord_x</code>	<code>tocoord_y</code>	<code>tocoord_z</code>	<code>type_d</code>	<code>use_d</code>	<code>watplnt_id</code>

---

**ENTITY TYPE NAME** `storm_sewer_discharge_point`

**ENTITY CLASS NAME** `utilities_storm_system`

**OBJECT TYPE** Point

**DEFINITION** Any location where storm sewer pipes directly discharge effluent.

**Attribute Name**

---

<code>basin_id</code>	<code>buildng_id</code>	<code>date_acqrd</code>	<code>dispostn_d</code>	<code>narrative</code>	<code>own_stat_d</code>
<code>owner_d</code>	<code>owner_ty_d</code>	<code>project_id</code>	<code>stodcrg_id</code>	<code>type_d</code>	

## Utilities: Entity Types and Attributes

---

**ENTITY TYPE NAME** storm\_sewer\_downspout\_point

**ENTITY CLASS NAME** utilities\_storm\_system

**OBJECT TYPE** Point

**DEFINITION** A pipe normally attached to the side of a building or structure which conveys rainfall runoff from the roof area to the ground surface or an underground collection system.

**Attribute Name**

---

base_elv	buildng_id	date_acqrd	dim_u_d	dispostn_d	dnspt_id
dnspt_lgth	elv_u_d	facil_id	grnd_elv	manuf_id	mat_d
model_no	narrative	project_id	size_d	stosect_id	stostat_id
type_d	watplnt_id				

---

**ENTITY TYPE NAME** storm\_sewer\_drainage\_basin\_area

**ENTITY CLASS NAME** utilities\_storm\_system

**OBJECT TYPE** G/GT Polygon

**DEFINITION** An area in which surface runoff collects and from which it is carried by a drainage system.

**Attribute Name**

---

area_u_d	basin_id	date_acqrd	dispostn_d	facil_id	grade_max
grade_mean	grade_min	grade_u_d	narrative	own_stat_d	owner_d
owner_ty_d	perim_u_d	project_id			

---

**ENTITY TYPE NAME** storm\_sewer\_drainage\_divide\_line

**ENTITY CLASS NAME** utilities\_storm\_system

**OBJECT TYPE** String/Chain

**DEFINITION** The border of a drainage basin where one side directs runoff to one basin and the other side directs runoff to a different basin.

**Attribute Name**

---

facil_id	feat_desc	frcoord_x	frcoord_y	sewrdm_id	tocoord_x
tocoord_y	tocoord_z				

---

**ENTITY TYPE NAME** storm\_sewer\_fitting\_point

**ENTITY CLASS NAME** utilities\_storm\_system

**OBJECT TYPE** Point

**DEFINITION** A fitting is an item used to connect, cap, plug or otherwise alter a pipe.

**Attribute Name**

---

basin_id	buildng_id	date_acqrd	dim_u_d	dispostn_d	facil_id
fit_depth	fit_lgth	fit_width	manuf_id	mat_d	model_no
narrative	own_stat_d	owner_d	owner_ty_d	project_id	serial_no
size_d	stodcrg_id	stofitt_id	stosect_id	type_d	

## Utilities: Entity Types and Attributes

---

**ENTITY TYPE NAME** storm\_sewer\_flood\_area

**ENTITY CLASS NAME** utilities\_storm\_system

**OBJECT TYPE** G/GT Polygon

**DEFINITION** Areas where the storm sewer drainage capacity has been exceeded resulting in localized flooding.

**Attribute Name**

---

area_u_d	basin_id	dim_u_d	elv_u_d	facil_id	fld_flow
fld_freq	flood_id	flow_elv	flow_u_d	flowwidth	narrative
perim_u_d	project_id	stochan_id	stodcrg_id		

---

**ENTITY TYPE NAME** storm\_sewer\_flow\_control\_point

**ENTITY CLASS NAME** utilities\_storm\_system

**OBJECT TYPE** Point

**DEFINITION** Devices for a storm water system to control the pressure in and out of the open channel.

**Attribute Name**

---

basin_id	buildng_id	cntrl_elv	date_acqrd	dim_u_d	dispostn_d
elv_u_d	facil_id	fct_depth	fct_length	fct_width	flctdev_id
instl_ty_d	manuf_id	model_no	narrative	own_stat_d	owner_d
owner_ty_d	project_id	serial_no	size_d	type_d	

---

**ENTITY TYPE NAME** storm\_sewer\_gate\_point

**ENTITY CLASS NAME** utilities\_storm\_system

**OBJECT TYPE** Point

**DEFINITION** A movable barrier used in an open channel.

**Attribute Name**

---

basin_id	cond_d	cptcy_u_d	date_acqrd	dim_u_d	dispostn_d
elv_u_d	facil_id	flctdev_id	gate_cptcy	gate_lgth	gate_st_d
gate_width	invert_elv	manuf_id	mat_d	narrative	own_stat_d
owner_d	owner_ty_d	project_id	size_d	stodcrg_id	stogate_id

---

**ENTITY TYPE NAME** storm\_sewer\_headwall\_point

**ENTITY CLASS NAME** utilities\_storm\_system

**OBJECT TYPE** Point

**DEFINITION** A wall (of any material) at the end of a culvert or drain to serve one or more of the following purposes: protect fill from scour or undermining; increase hydraulic efficiency, divert direction of flow, and serve as a retaining wall.

**Attribute Name**

---

facil_id	feat_desc	sewrwal_id
----------	-----------	------------

---

**ENTITY TYPE NAME** storm\_sewer\_inlet\_point

**ENTITY CLASS NAME** utilities\_storm\_system

**OBJECT TYPE** Point

**DEFINITION** The location where water is collected and received into the utility system.

## Utilities: Entity Types and Attributes

---

<b>Attribute Name</b>					
basin_id	cpty_dgn	date_acqrd	dispostn_d	elv_u_d	facil_id
flow_u_d	inlet_st_d	invert_elv	manuf_id	model_no	narrative
own_stat_d	owner_d	owner_ty_d	project_id	stodrg_id	stoinlt_id
weir_elv	weir_id				

---

**ENTITY TYPE NAME** `storm_sewer_junction_point`

**ENTITY CLASS NAME** `utilities_storm_system`

**OBJECT TYPE** Point

**DEFINITION** A box or small vault (usually concrete, brick, or cast iron) located below grade with above grade access where pipes intersect. The manhole also houses associated fittings, valves, meters, etc.

<b>Attribute Name</b>					
basin_id	buildng_id	dim_u_d	dispostn_d	drain_ty_d	elv_u_d
facil_id	invert_elv	manhole_id	manuf_id	mat_d	mh_dia
mh_length	mh_width	model_no	narrative	no_pipes	own_stat_d
owner_d	owner_ty_d	project_id	rim_elv	stodrg_id	type_d
use_d					

---

**ENTITY TYPE NAME** `storm_sewer_line`

**ENTITY CLASS NAME** `utilities_storm_system`

**OBJECT TYPE** String/Chain

**DEFINITION** A pipe used to carry a substance from location to location (main line, service line, vent line, etc).

<b>Attribute Name</b>					
basin_id	buildng_id	date_acqrd	dim_u_d	dispostn_d	drng_pat_d
drng_tx_d	drng_zon_d	elv_u_d	facil_id	frcoord_x	frcoord_y
inv_elv_1	inv_elv_2	lined_d	manuf_id	mat_d	model_no
narrative	own_stat_d	owner_d	owner_ty_d	pipe_lgth	pipe_width
press_max	press_norm	press_u_d	project_id	scrn_ty_d	size_d
slope_bot	slope_u_d	stodrg_id	stopipe_id	stosect_id	stostat_id
tocoord_x	tocoord_y	tocoord_z	type_d	use_d	watplnt_id

---

**ENTITY TYPE NAME** `storm_sewer_marker_point`

**ENTITY CLASS NAME** `utilities_storm_system`

**OBJECT TYPE** Point

**DEFINITION** A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc.

<b>Attribute Name</b>					
buildng_id	date_acqrd	dim_u_d	dispostn_d	facil_id	manuf_id
marker_id	model_no	narrative	own_stat_d	owner_d	owner_ty_d
pole_depth	pole_hght	pole_mat_d	project_id	rock_cnd_d	sign_hght
sign_mat_d	sign_text	sign_width	soil_cnd_d	type_d	

## Utilities: Entity Types and Attributes

---

**ENTITY TYPE NAME** `storm_sewer_oil_water_separator_point`

**ENTITY CLASS NAME** `utilities_storm_system`

**OBJECT TYPE** Point

**DEFINITION** A device or structure placed in the water stream to separate water from oil products.

**Attribute Name**

---

<code>basin_id</code>	<code>cpcy_u_d</code>	<code>date_acqrd</code>	<code>date_per_x</code>	<code>disposal</code>	<code>dispostn_d</code>
<code>facil_id</code>	<code>flow_u_d</code>	<code>flowcpcty</code>	<code>grtchbr_d</code>	<code>manuf_id</code>	<code>narrative</code>
<code>oil_cpcy</code>	<code>own_stat_d</code>	<code>owner_d</code>	<code>owner_ty_d</code>	<code>permit_no</code>	<code>pip_out_id</code>
<code>pipe_in_id</code>	<code>project_id</code>	<code>sep_code</code>	<code>sep_contnt</code>	<code>sep_name</code>	<code>sep_proccs</code>
<code>sep_volume</code>	<code>stodcrg_id</code>	<code>stosep_id</code>	<code>stostat_id</code>	<code>temp_optim</code>	<code>temp_u_d</code>
<code>type_d</code>	<code>vol_u_d</code>				

---

**ENTITY TYPE NAME** `storm_sewer_open_drainage_line`

**ENTITY CLASS NAME** `utilities_storm_system`

**OBJECT TYPE** String/Chain

**DEFINITION** Interception and removal of ground water or surface water by natural means.

**Attribute Name**

---

<code>area_u_d</code>	<code>bank_arm_d</code>	<code>basin_id</code>	<code>bed_mat_d</code>	<code>bot_width</code>	<code>chan_lgth</code>
<code>chan_st_d</code>	<code>date_acqrd</code>	<code>design_d</code>	<code>dim_u_d</code>	<code>dispostn_d</code>	<code>drng_zon_d</code>
<code>elv_u_d</code>	<code>facil_id</code>	<code>fld_zon_d</code>	<code>flmean_elv</code>	<code>flmean_top</code>	<code>flmean_xar</code>
<code>flooddepth</code>	<code>flow_mean</code>	<code>flow_u_d</code>	<code>frcoord_x</code>	<code>frcoord_y</code>	<code>inv_elv_1</code>
<code>inv_elv_2</code>	<code>narrative</code>	<code>no_floods</code>	<code>own_stat_d</code>	<code>owner_d</code>	<code>owner_ty_d</code>
<code>project_id</code>	<code>reach_name</code>	<code>slope_bot</code>	<code>slope_left</code>	<code>slope_rght</code>	<code>slope_u_d</code>
<code>stochan_id</code>	<code>stodcrg_id</code>	<code>tocoord_x</code>	<code>tocoord_y</code>	<code>tocoord_z</code>	<code>top_width</code>

---

**ENTITY TYPE NAME** `storm_sewer_pump_point`

**ENTITY CLASS NAME** `utilities_storm_system`

**OBJECT TYPE** Point

**DEFINITION** A mechanical device that draws material into itself through an entrance port and forces the material out through an exhaust port.

**Attribute Name**

---

<code>basin_id</code>	<code>buildng_id</code>	<code>cool_mth_d</code>	<code>date_acqrd</code>	<code>dispostn_d</code>	<code>elv_u_d</code>
<code>facil_id</code>	<code>flow_rate</code>	<code>flow_u_d</code>	<code>manuf_id</code>	<code>model_no</code>	<code>narrative</code>
<code>outflw_act</code>	<code>own_stat_d</code>	<code>owner_d</code>	<code>owner_ty_d</code>	<code>pip_out_id</code>	<code>pipe_in_id</code>
<code>prim_rqd_d</code>	<code>prime_meth</code>	<code>project_id</code>	<code>pump_elv</code>	<code>pump_hp</code>	<code>serial_no</code>
<code>stodcrg_id</code>	<code>stopump_id</code>	<code>stostat_id</code>	<code>type_d</code>	<code>use_d</code>	

---

**ENTITY TYPE NAME** `storm_sewer_pump_station_point`

**ENTITY CLASS NAME** `utilities_storm_system`

**OBJECT TYPE** Point

**DEFINITION** A building in which one or more pumps operate to supply material flowing at adequate pressure to or from a distribution system.

## Utilities: Entity Types and Attributes

---

<b>Attribute Name</b>					
alrmvlvlev	basin_id	buildng_id	cond_d	cpty_u_d	date_acqr
dim_u_d	dispostn_d	elv_u_d	facil_id	hi_wat_elv	invert_elv
narrative	no_pumps	nodal_elv	own_stat_d	owner_d	owner_ty_d
project_id	pump_elv	sta_length	sta_width	stodrg_id	stostat_id
type_d	wetwlcpcy				

---

**ENTITY TYPE NAME** `storm_sewer_reservoir_point`

**ENTITY CLASS NAME** `utilities_storm_system`

**OBJECT TYPE** Point

**DEFINITION** The location where storm sewer water is collected.

<b>Attribute Name</b>					
basin_id	date_acqr	date_const	depth_avg	dim_u_d	dispostn_d
elv_u_d	facil_id	inv_elv_av	name_d	narrative	out_cntr
own_stat_d	owner_d	owner_ty_d	project_id	res_id	res_length
res_typ_d	res_width	stodrg_id	use_d	x_dikes_d	

---

**ENTITY TYPE NAME** `storm_sewer_stilling_basin_point`

**ENTITY CLASS NAME** `utilities_storm_system`

**OBJECT TYPE** Point

**DEFINITION** The location where the energy from turbulent water flow is reduced.

<b>Attribute Name</b>					
basin_id	date_acqr	date_const	depth_avg	dim_u_d	dispostn_d
elv_u_d	facil_id	flctdev_id	inv_elv_av	name_d	narrative
out_cntr	own_stat_d	owner_d	owner_ty_d	project_id	sbn_id
sbn_length	sbn_width	stodrg_id	type_d	x_dikes_d	

---

**ENTITY TYPE NAME** `storm_sewer_valve_point`

**ENTITY CLASS NAME** `utilities_storm_system`

**OBJECT TYPE** Point

**DEFINITION** A fitting or device used for shutting or throttling flow through a line.

<b>Attribute Name</b>					
basin_id	date_acqr	dispostn_d	elv_u_d	facil_id	manhole_id
manuf_id	narrative	own_stat_d	owner_d	owner_ty_d	project_id
size_d	stodrg_id	stovlv_id	use_d	valve_elv	vlv_st_d

---

**ENTITY TYPE NAME** `utility_pole_guy_point`

**ENTITY CLASS NAME** `utilities_general`

**OBJECT TYPE** Point

**DEFINITION** A support configuration, which generally includes connecting hardware, cables, and anchor components, used to stabilize structures (poles, towers, etc.). Down guys typically connect to the structures at key stress points and extend to an anchor at the ground.

## Utilities: Entity Types and Attributes

---

<b>Attribute Name</b>					
anchor_att	anchor_ty	cbl_dia	cbl_length	cbl_mat_d	cbl_sht_d
cbl_ten	cbl_ty_d	cbldia_u_d	date_acqrd	design_d	dispostn_d
facil_id	frcoord_x	frcoord_y	guy_id	guy_ty_d	manuf_id
narrative	own_stat_d	owner_d	owner_ty_d	pole_id	project_id
ten_u_d	tocoord_x	tocoord_y	tocoord_z		

---

**ENTITY TYPE NAME** utility\_pole\_tower\_point

**ENTITY CLASS NAME** utilities\_general

**OBJECT TYPE** Point

**DEFINITION** A structure used to elevate wires, cables, or other lines above the ground surface.

<b>Attribute Name</b>					
capped_d	cond_d	date_acqrd	date_treat	design_d	dim_u_d
facil_id	grounded_d	manuf_id	mat_d	narrative	own_stat_d
owner_d	owner_ty_d	pole_id	pole_lgth	poleheight	project_id
treattyp_d	type_d				

---

**ENTITY TYPE NAME** wastewater\_discharge\_point

**ENTITY CLASS NAME** utilities\_wastewater\_system

**OBJECT TYPE** Point

**DEFINITION** Any location where wastewater pipes directly discharge effluent.

<b>Attribute Name</b>					
buildng_id	date_acqrd	dispostn_d	distrct_id	facil_id	narrative
own_stat_d	owner_d	owner_ty_d	pipe_id	project_id	tribut_cod
type_d	wwstank_id	wwtdcrg_id	wwtplnt_id		

---

**ENTITY TYPE NAME** wastewater\_disposal\_tank\_point

**ENTITY CLASS NAME** utilities\_wastewater\_system

**OBJECT TYPE** Point

**DEFINITION** An above or below grade receptacle or chamber for holding components on a temporary basis prior to transfer or use.

<b>Attribute Name</b>					
alt_vlv_d	area_u_d	buildng_id	cpty_u_d	date_acqrd	dim_u_d
dispostn_d	distrct_id	elv_u_d	facil_id	head_norm	head_u_d
invert_elv	manuf_id	mat_d	model_no	narrative	ovrflw_elv
own_stat_d	owner_d	owner_ty_d	permit_no	press_norm	press_u_d
project_id	serial_no	tank_cpty	tank_depth	tank_des_d	tank_dia
tank_lgth	tank_sty_d	tank_width	top_elv	tribut_cod	use_d
wwtank_id					

## Utilities: Entity Types and Attributes

---

**ENTITY TYPE NAME** wastewater\_downspout\_point

**ENTITY CLASS NAME** utilities\_wastewater\_system

**OBJECT TYPE** Point

**DEFINITION** A pipe normally attached to the side of a building or structure which conveys rainfall runoff from the roof area to the ground surface or an underground collection system.

**Attribute Name**

---

base_elv	buildng_id	date_acqrd	dim_u_d	dispostn_d	dnspt_lgth
elv_u_d	facil_id	grnd_elv	manuf_id	mat_d	model_no
narrative	pipe_id	project_id	size_d	station_id	type_d
wwtdspt_id	wwtplnt_id				

---

**ENTITY TYPE NAME** wastewater\_drain\_field\_area

**ENTITY CLASS NAME** utilities\_wastewater\_system

**OBJECT TYPE** G/GT Polygon

**DEFINITION** The area of influence where perforated pipe placed in gravel trenches carries effluent from a waste storage containment for percolation into the earth.

**Attribute Name**

---

area_u_d	buildng_id	date_acqrd	dim_u_d	dispostn_d	distrcit_id
drng_pat_d	drng_tx_d	elv_u_d	facil_id	frcoord_x	frcoord_y
inv_elv_1	inv_elv_2	lined_d	manuf_id	mat_d	model_no
narrative	own_stat_d	owner_d	owner_ty_d	perim_u_d	pipe_id
pipe_lgth	press_max	press_norm	press_u_d	project_id	size_d
slope_bot	slope_u_d	station_id	tocoord_x	tocoord_y	tocoord_z
tribut_cod	type_d	use_d	wwstank_id	wwtplnt_id	wwtsect_id

---

**ENTITY TYPE NAME** wastewater\_filtration\_bed\_area

**ENTITY CLASS NAME** utilities\_wastewater\_system

**OBJECT TYPE** Point

**DEFINITION** A below grade system consisting of perforated piping installed in sand or gravel beds or trenches designed to permit the uniform distribution and absorption of effluent from a septic tank or aerobic unit into the soil.

**Attribute Name**

---

area_u_d	buildng_id	cond_d	cpcty_u_d	date_acqrd	dim_u_d
dispostn_d	distrcit_id	drnfl_st_d	drng_pat_d	drng_tx_d	dstbx_d
dstbx_i_el	elv_u_d	facil_id	flow_rate	flow_u_d	inv_elv_1
inv_elv_2	laterl_slp	laterl_tot	laterlmean	length_u_d	manhole_d
manuf_id	mat_d	narrative	no_lateral	own_stat_d	owner_d
owner_ty_d	perc_u_d	perim_u_d	project_id	slope_u_d	soil_perc
tank_cpcty	tank_depth	tank_lgth	tank_st_d	tank_width	trench_wid
tribut_cod	use_d	wwstank_id			

## Utilities: Entity Types and Attributes

---

**ENTITY TYPE NAME** wastewater\_fitting\_point

**ENTITY CLASS NAME** utilities\_wastewater\_system

**OBJECT TYPE** Point

**DEFINITION** A fitting is an item used to connect, cap, plug or otherwise alter a pipe.

**Attribute Name**

---

buildng_id	date_acqrd	dim_u_d	dispostn_d	distrct_id	facil_id
fit_depth	fit_lgth	fit_width	manuf_id	mat_d	model_no
narrative	own_stat_d	owner_d	owner_ty_d	pipe_id	project_id
serial_no	size_d	tribut_cod	type_d	wwtfitt_id	wwtsect_id

---

**ENTITY TYPE NAME** wastewater\_grease\_trap\_point

**ENTITY CLASS NAME** utilities\_wastewater\_system

**OBJECT TYPE** Point

**DEFINITION** A tank which separates grease from water, collects the grease for removal, and allows the water to exit.

**Attribute Name**

---

buildng_id	cond_d	cpty_u_d	date_acqrd	dim_u_d	dispostn_d
distrct_id	drnfl_st_d	drng_pat_d	drng_tx_d	dstbx_d	dstbx_i_el
elv_u_d	facil_id	flow_rate	flow_u_d	gtp_cpty	gtp_depth
gtp_length	gtp_width	inv_elv_1	inv_elv_2	laterl_slp	laterl_tot
laterlmean	length_u_d	manhole_d	manuf_id	mat_d	narrative
no_lateral	own_stat_d	owner_d	owner_ty_d	perc_u_d	pip_out_id
pipe_in_id	project_id	slope_u_d	soil_perc	trap_id	trap_st_d
trench_wid	tribut_cod				

---

**ENTITY TYPE NAME** wastewater\_grit\_chamber\_point

**ENTITY CLASS NAME** utilities\_wastewater\_system

**OBJECT TYPE** Point

**DEFINITION** A chamber designed to remove sand, gravel, or other heavy solids that have subsiding velocities or specific gravities substantially greater than those of the organic solids in the waste water.

**Attribute Name**

---

cpty_u_d	date_acqrd	dispostn_d	distrct_id	facil_id	flow_u_d
flowcpty	grit_type	grtchbr_id	manuf_id	narrative	o_w_sep_d
own_stat_d	owner_d	owner_ty_d	pip_out_id	pipe_in_id	project_id
stor_cpty	tribut_cod	wwtplnt_id			

---

**ENTITY TYPE NAME** wastewater\_junction\_point

**ENTITY CLASS NAME** utilities\_wastewater\_system

**OBJECT TYPE** Point

**DEFINITION** A box or small vault (usually concrete, brick, or cast iron) located below grade with above grade access where pipes intersect. The manhole also houses associated fittings, valves, meters, etc.

## Utilities: Entity Types and Attributes

---

<b>Attribute Name</b>					
buildng_id	dim_u_d	dispostn_d	distrcet_id	drain_ty_d	elv_u_d
facil_id	invert_elv	liner_ty_d	manuf_id	mat_d	mh_dia
mh_length	mh_width	model_no	narrative	neut_agent	no_pipes
own_stat_d	owner_d	owner_ty_d	project_id	reactant	rim_elv
tribut_cod	type_d	use_d	wwtmnhl_id		

---

**ENTITY TYPE NAME** wastewater\_lagoon\_area

**ENTITY CLASS NAME** utilities\_wastewater\_system

**OBJECT TYPE** G/GT Polygon

**DEFINITION** A shallow man made pool or pond for the purpose of providing treatment of domestic wastewater.

<b>Attribute Name</b>					
aerator_d	aeratr_pow	area_u_d	basin_id	date_acqrd	date_anl
date_const	depth_avg	dim_u_d	distrcet_id	elv_u_d	facil_id
freq_u_d	hp_u_d	inv_elv_av	lab_name_d	lab_ty_d	lagoon_id
lgn_length	lgn_width	manage_off	manuf_id	mon_agency	name_d
narrative	no_pumps	out_cntr	own_stat_d	owner_d	owner_ty_d
perim_u_d	pip_out_id	pip_outl_d	pipe_in_id	project_id	smpl_freq
soil_cdn_d	soil_ero_d	soil_fam_d	soil_tex_d	test_ty_d	tribut_cod
type_d	user_ind_d	user_san_d	weir_id	wer_outl_d	wwtderg_id
wwtplnt_id	x_dikes_d				

---

**ENTITY TYPE NAME** wastewater\_line

**ENTITY CLASS NAME** utilities\_wastewater\_system

**OBJECT TYPE** String/Chain

**DEFINITION** A pipe used to carry a substance from location to location (main line, service line, vent line, etc).

<b>Attribute Name</b>					
area_u_d	buildng_id	date_acqrd	dim_u_d	dispostn_d	distrcet_id
drng_pat_d	drng_tex_d	elv_u_d	facil_id	frcoord_x	frcoord_y
inv_elv_1	inv_elv_2	lined_d	manuf_id	mat_d	model_no
narrative	own_stat_d	owner_d	owner_ty_d	perim_u_d	pipe_id
pipe_lgth	press_max	press_norm	press_u_d	project_id	size_d
slope_bot	slope_u_d	station_id	tocoord_x	tocoord_y	tocoord_z
tribut_cod	type_d	use_d	wwstank_id	wwtplnt_id	wwtsect_id

---

**ENTITY TYPE NAME** wastewater\_marker\_point

**ENTITY CLASS NAME** utilities\_wastewater\_system

**OBJECT TYPE** Point

**DEFINITION** A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc.

## Utilities: Entity Types and Attributes

---

<b>Attribute Name</b>					
buildng_id	date_acqrd	dim_u_d	dispostn_d	facil_id	manuf_id
marker_id	model_no	narrative	own_stat_d	owner_d	owner_ty_d
pole_depth	pole_hght	pole_mat_d	project_id	rock_cnd_d	sign_hgth
sign_mat_d	sign_text	sign_width	soil_cnd_d	type_d	

---

**ENTITY TYPE NAME** wastewater\_meter\_point

**ENTITY CLASS NAME** utilities\_wastewater\_system

**OBJECT TYPE** Point

**DEFINITION** A device installed in a line for measuring the quantity and or rate of water through a section of line.

<b>Attribute Name</b>					
buildng_id	date_acqrd	design_d	dim_u_d	dispostn_d	distrcet_id
elv_u_d	facil_id	instl_ty_d	manuf_id	meter_elv	model_no
mtr_depth	mtr_length	mtr_width	narrative	own_stat_d	owner_d
owner_ty_d	pipe_id	project_id	serial_no	size_d	type_d
wwtmetr_id	wwtmnhl_id				

---

**ENTITY TYPE NAME** wastewater\_neutralizer\_point

**ENTITY CLASS NAME** utilities\_wastewater\_system

**OBJECT TYPE** Point

**DEFINITION** A receptacle or chamber, which by chemical reactions with reactant materials in the receptacle, makes liquid waste passing through the receptacle chemically neutral.

<b>Attribute Name</b>					
buildng_id	dim_u_d	dispostn_d	distrcet_id	drain_ty_d	elv_u_d
facil_id	invert_elv	liner_ty_d	manuf_id	mat_d	model_no
narrative	neut_agent	neut_dia	neut_lngth	neut_width	no_pipes
own_stat_d	owner_d	owner_ty_d	project_id	reactant	rim_elv
tribut_cod	type_d	wwtneut_id			

---

**ENTITY TYPE NAME** wastewater\_oil\_water\_separator\_point

**ENTITY CLASS NAME** utilities\_wastewater\_system

**OBJECT TYPE** Point

**DEFINITION** A device or structure placed in the waste stream to separate water from oil products.

<b>Attribute Name</b>					
cpty_u_d	date_acqrd	date_per_x	disposal	dispostn_d	distrcet_id
facil_id	flow_u_d	flowcpty	grtchbr_d	manuf_id	narrative
oil_cpty	own_stat_d	owner_d	owner_ty_d	permit_no	pip_out_id
pipe_in_id	project_id	sep_code	sep_contnt	sep_name	sep_proccss
sep_volume	station_id	temp_optim	temp_u_d	tribut_cod	type_d
vol_u_d	wwstank_id	wwtplnt_id	wwtsep_id		

## Utilities: Entity Types and Attributes

---

**ENTITY TYPE NAME** wastewater\_pump\_ejector\_station\_point

**ENTITY CLASS NAME** utilities\_wastewater\_system

**OBJECT TYPE** Point

**DEFINITION** A building in which one or more pumps operate to supply material flowing at adequate pressure to or from a distribution system.

### Attribute Name

alrmvlelv	buildng_id	cond_d	cpty_u_d	date_acqrd	design_d
dim_u_d	dispostn_d	distrct_id	elv_u_d	facil_id	hi_wat_elv
invert_elv	narrative	no_pumps	nodal_elv	own_stat_d	owner_d
owner_ty_d	project_id	pump_elv	sta_length	sta_width	station_id
tribut_cod	type_d	wetwlcpcty	wwtplnt_id		

---

**ENTITY TYPE NAME** wastewater\_pump\_point

**ENTITY CLASS NAME** utilities\_wastewater\_system

**OBJECT TYPE** Point

**DEFINITION** A mechanical device that draws material into itself through an entrance port and forces the material out through an exhaust port.

### Attribute Name

buildng_id	cool_mth_d	date_acqrd	dispostn_d	distrct_id	elv_u_d
facil_id	flow_u_d	manuf_id	model_no	narrative	outflw_act
outflw_rat	own_stat_d	owner_d	owner_ty_d	pip_out_id	pipe_in_id
prim_rqd_d	prime_meth	project_id	pump_elv	pump_hp	serial_no
station_id	tribut_cod	type_d	use_d	wwtplnt_id	wwtpump_id

---

**ENTITY TYPE NAME** wastewater\_septic\_tank\_point

**ENTITY CLASS NAME** utilities\_wastewater\_system

**OBJECT TYPE** Point

**DEFINITION** Typically, a below grade receptacle or chamber in which solid organic waste is decomposed and purified by anaerobic bacteria.

### Attribute Name

area_u_d	buildng_id	cond_d	cpty_u_d	date_acqrd	dim_u_d
dispostn_d	distrct_id	drnfl_st_d	drng_pat_d	drng_tex_d	dstbx_d
dstbx_i_el	elv_u_d	facil_id	flow_rate	flow_u_d	inv_elv_1
inv_elv_2	laterl_slp	laterl_tot	laterlmean	length_u_d	manhole_d
manuf_id	mat_d	narrative	no_lateral	own_stat_d	owner_d
owner_ty_d	perc_u_d	perim_u_d	project_id	slope_u_d	soil_perc
tank_cptcy	tank_depth	tank_lgth	tank_st_d	tank_width	trench_wid
tribut_cod	use_d	wwstank_id			

## Utilities: Entity Types and Attributes

---

**ENTITY TYPE NAME** wastewater\_treatment\_plant\_area

**ENTITY CLASS NAME** utilities\_wastewater\_system

**OBJECT TYPE** G/GT Polygon

**DEFINITION** Equipment; or a structure containing equipment, processes, piping, or components; used to treat and remove unwanted constituents.

### Attribute Name

---

area_u_d	buildng_id	bypass_d	cond_d	date_acqrd	dim_u_d
dispostn_d	elv_u_d	facil_id	flow_act	flow_rate	flow_u_d
name_d	narrative	no_pumps	own_stat_d	owner_d	owner_ty_d
perim_u_d	plant_elv	plant_lgth	plantwidth	project_id	type_d
wwtplnt_id					

---

**ENTITY TYPE NAME** wastewater\_treatment\_unit\_area

**ENTITY CLASS NAME** utilities\_wastewater\_system

**OBJECT TYPE** Point

**DEFINITION** A waste water treatment plant and all appurtenant equipment, buildings, and facilities relating to water treatment.

### Attribute Name

---

area_u_d	buildng_id	bypass_d	cond_d	date_acqrd	dim_u_d
dispostn_d	elv_u_d	facil_id	flow_act	flow_rate	flow_u_d
name_d	narrative	no_pumps	own_stat_d	owner_d	owner_ty_d
perim_u_d	plant_elv	plant_lgth	plantwidth	project_id	type_d
wwtplnt_id					

---

**ENTITY TYPE NAME** wastewater\_valve\_point

**ENTITY CLASS NAME** utilities\_wastewater\_system

**OBJECT TYPE** Point

**DEFINITION** A fitting or device used for shutting or throttling flow through a line.

### Attribute Name

---

date_acqrd	dispostn_d	distrct_id	elv_u_d	facil_id	manuf_id
narrative	own_stat_d	owner_d	owner_ty_d	pipe_id	project_id
size_d	tribut_cod	use_d	valve_elv	vlv_st_d	wwtmnhl_id
wwtplnt_id	wwtvly_id				

---

**ENTITY TYPE NAME** water\_anode\_point

**ENTITY CLASS NAME** utilities\_water\_system

**OBJECT TYPE** Point

**DEFINITION** A material used for utility distribution systems that is electrically connected to a less electrolytically active material so that it will oxidize in the place of the less active material.

### Attribute Name

---

anode_wght	facil_id	material_d	narrative	watanod_id	wght_u_d
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## Utilities: Entity Types and Attributes

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**ENTITY TYPE NAME** water\_anode\_test\_station\_point

**ENTITY CLASS NAME** utilities\_water\_system

**OBJECT TYPE** Point

**DEFINITION** A central location where anodes are tested for performance.

**Attribute Name**

---

facil_id	insl_typ_d	narrative	no_term	type_d	watant_id
wire_siz_d	wire_typ_d				

---

**ENTITY TYPE NAME** water\_fire\_connection\_point

**ENTITY CLASS NAME** utilities\_water\_system

**OBJECT TYPE** Point

**DEFINITION** An apparatus which dispenses fluids for use in fire management.

**Attribute Name**

---

buildng_id	con_type_d	date_acqrd	dia_u_d	dispostn_d	elv_u_d
facil_id	fire_flow	flow_test	flow_u_d	ground_elv	hyd_elv
hyd_ty_d	inlet_dia	manuf_id	meas_ty_d	model_no	narrative
outcon1dia	outcon2dia	outcon3dia	own_stat_d	owner_d	owner_ty_d
press_max	press_resd	press_stat	press_u_d	project_id	size_d
size_u_d	source_d	vlv_st_d	wathydr_id	watpipe_id	watvlv_id
watzone_id					

---

**ENTITY TYPE NAME** water\_fitting\_point

**ENTITY CLASS NAME** utilities\_water\_system

**OBJECT TYPE** Point

**DEFINITION** A fitting is an item used to connect, cap, plug or otherwise alter a pipe.

**Attribute Name**

---

buildng_id	date_acqrd	dia_in	dia_u_d	dim_u_d	dispostn_d
elv_u_d	facil_id	fit_elv	fit_lgth	fit_width	fitting_id
ground_elv	manuf_id	mat_d	model_no	narrative	own_stat_d
owner_d	owner_ty_d	project_id	serial_no	size_d	size_u_d
type_d	watpipe_id	watsect_id	watzone_id		

---

**ENTITY TYPE NAME** water\_hydrant\_point

**ENTITY CLASS NAME** utilities\_water\_system

**OBJECT TYPE** Point

**DEFINITION** An apparatus which dispenses fluids.

## Utilities: Entity Types and Attributes

---

<b>Attribute Name</b>					
buildng_id	date_acqrd	design_d	dia_u_d	dispostn_d	elv_u_d
facil_id	fire_flow	flow_test	flow_u_d	ground_elv	hyd_elv
hyd_ty_d	inlet_dia	manuf_id	meas_ty_d	model_no	narrative
outcon1dia	outcon2dia	outcon3dia	own_stat_d	owner_d	owner_ty_d
press_max	press_resd	press_stat	press_u_d	project_id	size_d
size_u_d	source_d	vlv_st_d	wathydr_id	watpipe_id	watv lv_id
watzone_id					

---

**ENTITY TYPE NAME** water\_intake\_point

**ENTITY CLASS NAME** utilities\_water\_system

**OBJECT TYPE** Point

**DEFINITION** The location where water is allowed into the water distribution system.

<b>Attribute Name</b>					
area_u_d	buildng_id	date_acqrd	dispostn_d	facil_id	name_d
narrative	own_stat_d	owner_d	owner_ty_d	perim_u_d	project_id
type_d	watsrce_id				

---

**ENTITY TYPE NAME** water\_junction\_point

**ENTITY CLASS NAME** utilities\_water\_system

**OBJECT TYPE** Point

**DEFINITION** A box or small vault (usually concrete, brick, or cast iron) located below grade with above grade access where pipes intersect. The manhole also houses associated fittings, valves, meters, etc.

<b>Attribute Name</b>					
airrfv lv_d	buildng_id	dim_u_d	dispostn_d	drain_ty_d	elv_u_d
facil_id	ground_elv	invert_elv	manuf_id	mat_d	mh_dia
mh_length	mh_width	model_no	narrative	no_pipes	no_valves
own_stat_d	owner_d	owner_ty_d	project_id	rim_elv	type_d
use_d	watmnhl_id	watzone_id			

---

**ENTITY TYPE NAME** water\_line

**ENTITY CLASS NAME** utilities\_water\_system

**OBJECT TYPE** String/Chain

**DEFINITION** A pipe used to carry a substance from location to location (main line, service line, vent line, etc).

## Utilities: Entity Types and Attributes

---

<b>Attribute Name</b>					
buildng_id	catprot_d	date_acqrd	dim_u_d	dispostn_d	elv_u_d
facil_id	frcoord_x	frcoord_y	grnd_elv_1	grnd_elv_2	inv_elv_1
inv_elv_2	manuf_id	mat_d	model_no	narrative	own_stat_d
owner_d	owner_ty_d	pipe_lgth	press_max	press_norm	press_u_d
project_id	size_d	slope_bot	slope_u_d	source_d	tape_d
tocoord_x	tocoord_y	tocoord_z	type_d	use_d	watpipe_id
watplnt_id	watsect_id	watsrce_id	watstat_id	wattank_id	watzone_id

---

**ENTITY TYPE NAME** water\_marker\_point

**ENTITY CLASS NAME** utilities\_water\_system

**OBJECT TYPE** Point

**DEFINITION** A sign, concrete monument, etc. installed either directly above or immediately adjacent to underground lines, bends, fittings, etc.

<b>Attribute Name</b>					
buildng_id	date_acqrd	dim_u_d	dispostn_d	facil_id	manuf_id
marker_id	model_no	narrative	own_stat_d	owner_d	owner_ty_d
pole_depth	pole_hght	pole_mat_d	project_id	rock_cnd_d	sign_hgth
sign_mat_d	sign_text	sign_width	soil_cnd_d	type_d	

---

**ENTITY TYPE NAME** water\_meter\_point

**ENTITY CLASS NAME** utilities\_water\_system

**OBJECT TYPE** Point

**DEFINITION** A device installed in a line for measuring the quantity and or rate of water flowing to a facility or through a section of line.

<b>Attribute Name</b>					
buildng_id	date_acqrd	dispostn_d	elv_u_d	facil_id	ground_elv
instl_ty_d	manuf_id	meter_elv	model_no	mtr_custmr	narrative
own_stat_d	owner_d	owner_ty_d	project_id	serial_no	size_d
size_u_d	source_d	srvc_mtr_d	type_d	watmetr_id	watmnhl_id
watpipe_id	watzone_id				

---

**ENTITY TYPE NAME** water\_pressure\_reducing\_station\_point

**ENTITY CLASS NAME** utilities\_water\_system

**OBJECT TYPE** Point

**DEFINITION** A station consists of a box/pit containing one or more pressure regulators and appurtenant shutoff valves and fittings.

## Utilities: Entity Types and Attributes

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<b>Attribute Name</b>					
buildng_id	cond_d	date_acqrd	date_const	dispostn_d	elv_u_d
facil_id	ground_elv	manuf_id	model_no	narrative	own_stat_d
owner_d	owner_ty_d	pip_out_id	pipe_in_id	press_in	press_oper
press_out	press_u_d	project_id	red_sta_id	source_d	sta_elv
watreg_id	watstat_id	watzone_id			

---

**ENTITY TYPE NAME** water\_pump\_point

**ENTITY CLASS NAME** utilities\_water\_system

**OBJECT TYPE** Point

**DEFINITION** A mechanical device that draws material into itself through an entrance port and forces the material out through an exhaust port.

<b>Attribute Name</b>					
buildng_id	cool_mth_d	cpty_act	cpty_rate	cpty_u_d	date_acqrd
dispostn_d	elv_u_d	facil_id	ground_elv	manuf_id	model_no
narrative	observ_id	own_stat_d	owner_d	owner_ty_d	pip_out_id
pipe_in_id	prim_rqrd	prime_meth	project_id	pump_elv	pwr_gen
pwr_req_d	serial_no	tdh_rated	tdh_u_d	type_d	use_d
watpump_id	watsrce_id	watstat_id	watzone_id		

---

**ENTITY TYPE NAME** water\_pump\_station\_point

**ENTITY CLASS NAME** utilities\_water\_system

**OBJECT TYPE** Point

**DEFINITION** A building in which one or more pumps operate to supply material flowing at adequate pressure to or from a distribution system.

<b>Attribute Name</b>					
buildng_id	cond_d	cpty_u_d	date_acqrd	dim_u_d	dispostn_d
elv_u_d	facil_id	ground_elv	hi_wat_elv	narrative	no_pumps
nodal_elv	own_stat_d	owner_d	owner_ty_d	project_id	pump_elv
source_d	src_name_d	sta_cpty	sta_elv	sta_length	sta_ty_d
sta_width	tnkalrmelv	tribut_cod	vol_u_d	watplnt_id	watstat_id
watzone_id	wetwlcpty				

---

**ENTITY TYPE NAME** water\_rectifier\_point

**ENTITY CLASS NAME** utilities\_water\_system

**OBJECT TYPE** Point

**DEFINITION** A device that changes alternating current to direct current for an impressed current cathodic protection system on an element of the distribution system.

<b>Attribute Name</b>					
cool_mth_d	currnt_out	currnt_u_d	encl_typ_d	facil_id	int_mtr_d
narrative	no_phases	phas_ltr_d	volt_in_d	volt_out_d	watrect_id

## Utilities: Entity Types and Attributes

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**ENTITY TYPE NAME** water\_regulator\_reducer\_point

**ENTITY CLASS NAME** utilities\_water\_system

**OBJECT TYPE** Point

**DEFINITION** A pressure regulator automatically reduces the pressure on the downstream side of the valve to a preset magnitude.

**Attribute Name**

---

buildng_id	date_acqrd	dispostn_d	elv_u_d	facil_id	ground_elv
manuf_id	model_no	narrative	own_stat_d	owner_d	owner_ty_d
pip_out_id	pipe_in_id	press_in	press_out	press_reqd	press_u_d
project_id	reg_elv	serial_no	size_d	type_d	watmnhl_id
watreg_id	watstat_id	watzone_id			

---

**ENTITY TYPE NAME** water\_reservoir\_area

**ENTITY CLASS NAME** utilities\_water\_system

**OBJECT TYPE** G/GT Polygon

**DEFINITION** A body of water which supplies water to a water distribution system.

**Attribute Name**

---

alarm_lv1	alt_vlv_d	area_u_d	buildng_id	date_acqrd	dim_u_d
dispostn_d	elv_u_d	facil_id	ground_elv	head_norm	head_u_d
invert_elv	level_1_on	level_2_on	level_off	level_shut	manuf_id
mat_d	model_no	narrative	ovrlfw_elv	own_stat_d	owner_d
owner_ty_d	perim_u_d	permit_no	press_almr	press_high	press_low
press_norm	press_u_d	project_id	serial_no	tank_dia	tank_lgth
tank_st_d	tank_vol	tank_width	top_elv	type_d	vol_u_d
wattank_id	watzone_id				

---

**ENTITY TYPE NAME** water\_source\_area

**ENTITY CLASS NAME** utilities\_water\_system

**OBJECT TYPE** G/GT Polygon

**DEFINITION** The point from which the utility is supplied a product for processing and distribution.

**Attribute Name**

---

area_u_d	buildng_id	date_acqrd	dispostn_d	facil_id	name_d
narrative	own_stat_d	owner_d	owner_ty_d	perim_u_d	project_id
type_d	watsrce_id				

---

**ENTITY TYPE NAME** water\_tank\_point

**ENTITY CLASS NAME** utilities\_water\_system

**OBJECT TYPE** Point

**DEFINITION** An above or below grade receptacle or chamber for holding components on a temporary basis prior to transfer or use.

## Utilities: Entity Types and Attributes

---

<b>Attribute Name</b>					
alarm_lvl	alt_vlv_d	area_u_d	buildng_id	date_acqrd	dim_u_d
dispostn_d	elv_u_d	facil_id	ground_elv	head_norm	head_u_d
invert_elv	level_1_on	level_2_on	level_off	level_shut	manuf_id
mat_d	model_no	narrative	ovrlfw_elv	own_stat_d	owner_d
owner_ty_d	perim_u_d	permit_no	press_alm	press_high	press_low
press_norm	press_u_d	project_id	serial_no	tank_dia	tank_lgth
tank_st_d	tank_vol	tank_width	top_elv	type_d	vol_u_d
wattank_id	watzone_id				

---

**ENTITY TYPE NAME** water\_treatment\_plant\_area

**ENTITY CLASS NAME** utilities\_water\_system

**OBJECT TYPE** G/GT Polygon

**DEFINITION** A water treatment plant and all appurtenant equipment, buildings, and facilities relating to water treatment.

<b>Attribute Name</b>					
area_u_d	buildng_id	bypass_d	cond_d	date_acqrd	dim_u_d
dispostn_d	elv_u_d	facil_id	flow_act	flow_rate	flow_u_d
ground_elv	name_d	narrative	no_pumps	own_stat_d	owner_d
owner_ty_d	perim_u_d	plant_elv	plant_lgth	plantwidth	project_id
source_d	type_d	watplnt_id	watsrce_id		

---

**ENTITY TYPE NAME** water\_treatment\_unit\_area

**ENTITY CLASS NAME** utilities\_water\_system

**OBJECT TYPE** G/GT Polygon

**DEFINITION** A water separation pond or other pool designed to allow solid material decomposition.

<b>Attribute Name</b>					
area_u_d	buildng_id	bypass_d	cond_d	date_acqrd	dim_u_d
dispostn_d	elv_u_d	facil_id	flow_act	flow_rate	flow_u_d
ground_elv	name_d	narrative	no_pumps	own_stat_d	owner_d
owner_ty_d	perim_u_d	plant_elv	plant_lgth	plantwidth	project_id
source_d	type_d	watplnt_id	watsrce_id		

---

**ENTITY TYPE NAME** water\_valve\_point

**ENTITY CLASS NAME** utilities\_water\_system

**OBJECT TYPE** Point

**DEFINITION** A fitting or device used for shutting or throttling flow through a line.

## Utilities: Entity Types and Attributes

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<b>Attribute Name</b>					
branch_sys	date_acqrd	dispostn_d	elv_u_d	facil_id	ground_elv
manuf_id	narrative	own_stat_d	owner_d	owner_ty_d	project_id
size_u_d	use_d	valve_elv	vlv_size	vlv_st_d	watmnhl_id
watpipe_id	watvlv_id	watzone_id			

---

**ENTITY TYPE NAME** water\_vent\_point

**ENTITY CLASS NAME** utilities\_water\_system

**OBJECT TYPE** Point

**DEFINITION** A valve installed in a line to either release air trapped in the line, and/or allow air into a line to relieve a vacuum condition.

<b>Attribute Name</b>		
facil_id	feat_desc	watvent_id